DOCUMENT RESUME

ED 047 809 PS 004 451

TITLE	Programs for Infants and Young Children. Part III: Health.
INSTITUTION	Appalachian Regional Commission, Washington, D.C.
PUB DATE	Oct 70
NOTE	166p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	Community Programs, Comprehensive Programs, Crippled Children, Day Care Services, Dental Health, Family Planning, *Health Personnel, *Health Programs, Health Services, Infants, *Medical Services, Mothers, Paramedical Occupations, Pregnancy, *Preschool Children, *Program Descriptions, Unwed Mothers
IDENTIFIERS	Head Start

ABSTRACT

Directed toward the improvement of health care for mothers and young children, this report describes a number of comprehensive programs focused on health and reports on projects which have singled out one or more specific maternal or child health services. Included are descriptions of existing community programs for pregnant schoolgirls, health policies and procedures for day care centers, family planning services, and services for crippled children. Considerable attention is given to a discussion of the acute manpower shortage, especially that of trained medical personnel. (AJ)

ED047809

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Programs for Infants and Young Children

Part III: Health

Child Development Staff

PS 004451

APPALACHIAN REGIONAL COMMISSION
1666 Connecticut Avenue, N. W.
Washington, D. C. 20235

OCTOBER 1970

PROGRAMS FOR INFANTS AND YOUNG CHILDREN

PART III: HEALTH

Table of Contents

Preface vi

A. COMPREHENSIVE PROGRAMS WITH FOCUS ON HEALTH

1. Programs for Pregnant Schoolgirls: Washington, D. C.; Winston-Salem, North Carolina; New Haven, Connecticut 3

a. The Webster School: A District of Columbia Program for Pregnant Girls 5

b. The Program for Continuing Education Winston-Salem, North Carolina; Mrs. Josephine Shaffner 18

c. Polly T. McCabe Center, New Haven, Connecticut; Phillip H. Sarrel, M.D. 20

2. Health Policy and Procedures in a Day Care Center

a. The Institute for Child and Family Development, University of North Carolina at Greensboro; Mary Elizabeth Keister, Ph.D. 22

b. Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill; Ann DeHuff Peters, M.D. 28

B. COMPREHENSIVE HEALTH PROGRAMS

1. Maricopa County Health Department, Maricopa County, Arizona; Pearl Tang, M.D. 38

2. Maternal and Child Health Division, West Virginia Department of Health, Charleston, West Virginia; Jack Basman, M.D. 44

3. Maternal and Infant Care Project, Department of Public Health, the District of Columbia; Edward R. Wernitznig, M.D. 47

4. Maternal and Infant Care Project, Kentucky Department of Health, Frankfort, Kentucky; Jorge Deju, M.D. 53

5. Maternal and Infant Care Projects, Department of Health, the City of New York, Office of Director, Maternal and Infant Care Projects 57

6. Office of Child Development, Head Start Health Program, Atlanta, Georgia; Sanford Matthews, M.D. 60

7. Office of Child Development, Head Start Health Program, Private and Parochial Schools, Chicago, Illinois; Robert Mendleson, M.D. 62

8. Office of Child Development, Head Start Health Program, Fresno County, California; Mrs. Joanna Jameson 64

9. Student American Medical Association, Task Force on Appalachian Child Development, Spruce Pine, North Carolina; Jerry Cade 68

C. DIRECTED PROGRAMS

Family Planning Services 76

1. Family Planning Programs

a. Maternal and Child Health Family Planning Service for the St. Louis City and County Area, Submitted to the Office of Economic
e Opportunity 77

b. Family Planning Program, Tulane University School of Public Health and Tropical Medicine; Joseph D. Beasley, M.D. 85

c. Guidelines for Developing Family Planning Services, Ohio Department of Health; Effie Ellis, M.D. 87

2. State Service for Crippled Children, University of Iowa, Vision Screening of Preschool Children 95

3. Vanderbilt University Medical and Law Students Program in Appalachia, Comprehensive Health Screening; William Dow 100

D. MANPOWER: CONSIDERATIONS AND MODELS

Manpower: Considerations and Models 107

1. The Services and Staff of Several Programs

a. Children and Youth Project, Dade County, Florida 108

b. Maternal and Infant Care Project, Birmingham, Alabama 110

c. Proposed Staffing Pattern, Appalachia 112

2. The Expanded Role of the Nurse-Practitioner 114

a. Frontier Nursing Service Midwifery Program Wendover, Kentucky; Helen E. Browne, O.B.E., R.N., S.C.M. 117

b. Nurse-Midwifery Service Program Proposal, Maternal and Infant Care Projects, Department of Health, New York City; Dorothea M. Lang, R.N., C.N.M., M.P.H. 120

c. Proposal for the Training and Utilization of Maternity Nurse-Practitioners in the District of Columbia; Mary Helen Carroll, R.N., C.N.M., M.H.A. 143

d. Pediatric Nurse-Practitioner 146

3. Selected Programs, Health Career Division, Greenville Tech, Greenville, South Carolina 147

E. APPENDIX 157

F. BIBLIOGRAPHY 194

PROGRAMS FOR INFANTS AND YOUNG CHILDREN

PART III: HEALTH

PREFACE

Seventeen countries have lower infant mortality rates than that of the United States.[1] Further, our rate (24.8 deaths per 1000 live births) is no longer declining at its former pace. In large part this is due to a continuing rate as high as 45 deaths per 1000 live births in many Appalachian counties and inner city ghettos.

Reversing this trend and improving the delivery of health care to mothers and young children becomes a critical task for each child development committee. We are all well aware of the many children who are dying from diseases for which there is treatment and of the long-reaching effects of untreated childhood illness for those who do survive.

---

[1] Vital Health Statistics: Public Health Service, United States Department of Health, Education, and Welfare; Washington, D.C.; 1967; p. 2. According to the latest information from the Statistical Office of the United Nations, in 1964 infant mortality in the United States exceeded that in a number of other countries:

Sweden	14.2	England and Wales	19.9
Netherlands	14.8	Japan	20.4
Norway	16.4	Czechoslovakia (provisional)	21.2
Finland	17.0	Ukrainian SSR	22.0
Iceland	17.7	France	23.3
Denmark	18.7	China (Taiwan)	23.9
Switzerland	19.0	Scotland	24.0
New Zealand	19.1	Canada	24.7
Australia	19.1	United States of America	24.8

This manual contains descriptions of a number of programs aimed at mothers and young children. Included are comprehensive programs which have focused on health, comprehensive health programs, and projects which have singled out one or more specific maternal or child health services. Mothers who deliver without prenatal care often give unfamiliarity with community resources as one of the chief barriers to obtaining care. Therefore, we have included information about the existing community programs as well as a description of the services and the staff necessary to deliver them.

Identifying maternal and child health services, delivery systems, and staffing patterns of programs operating in other communities is a first step toward implementing improved child health care. Another basic consideration is the financing of these services. Although funding sources have been identified for each of the programs included in this manual, there is no information about various health insurance plans or the innovative prepayment programs. For this reason, each child development committee will probably want to investigate new ways of financing health services. The Kaiser-Permanente Prepayment Plan, based in Oakland, California, has operated successfully for over twenty years. Blue Cross/Blue Shield is presently preparing a plan based on the Kaiser model.

The final section of this volume deals with manpower issues related specifically to the delivery of maternal and child health services. The shortage of trained medical

manpower has been especially acute in Appalachian counties where the physician/population ratio is sometimes as high as one to 5000, compared to a national average of one physician for approximately 800 people. The realities of the situation suggest that at least for the immediate future, it must be possible for each physician to be complemented by a group of well-prepared professionals and paraprofessionals so that the physician can be used most efficiently and most effectively.

The problems of providing proper health care to mothers and young children are critical, but they are not impossible to solve. We must commit our human and financial resources and begin the task of making excellent health services a reality for all children.

A. COMPREHENSIVE PROGRAMS

WITH FOCUS ON HEALTH

1. Programs for Pregnant Schoolgirls: Washington, D. C. Winston-Salem, North Carolina New Haven, Connecticut

How to provide schooling and needed health and welfare services to schoolgirls who are pregnant is a problem of increasing urgency in many communities. Schools, of course, have always had among their students some girls who became pregnant. In recent years, however, the number of such girls has increased markedly.

School systems have traditionally dealt with pregnancy by excluding the girls from school or providing limited home instruction. Moreover, most school systems were not eager for these girls to return to school after childbirth.

The result is that schooling is either interrupted or ended and that girls, because of the policy of expulsion from school, hide their pregnancy as long as they can and do not secure proper health supervision early in pregnancy.

In addition to reinforcing the cycle of poverty by poor prenatal health care, which in turn produces less healthy offspring, the end to schooling before completion means a future of low paying, unskilled jobs. In addition, there is mounting public ire over financial support of illegitimate children through public funds.

In view of all this, new approaches to the problem are being tried. In different areas of the country, a number of

special programs have been established to meet the educational, medical, and social needs of pregnant schoolgirls. Although almost all of these programs are "comprehensive," their emphases vary.

In the following section there are descriptions of three programs for pregnant schoolgirls. The Webster School of the District of Columbia, which had the most striking results in improving both the health of the girls during pregnancy and the outcome of pregnancy, is described in detail. The Winston-Salem, North Carolina, and New Haven, Connecticut, programs are also described. These are only three of the more than forty such programs presently in operation.

The present public interest in and attention to increased day care facilities offer further resources for girls in programs such as these. With the creation of additional day care facilities will also come new job opportunities. Training and employing girls from this group may solve part of the manpower needs in many communities and offer rewarding employment for the girls.

a. The Webster School: A District of Columbia Program for Pregnant Girls

The immediate purpose of the project was to meet the educational, medical, and social needs of the girls who attended the Webster School. This was to be accomplished by establishing a special school in which teaching and health and welfare services would be provided by a multidisciplinary team. The program involved cooperation, therefore, between Public Schools of the District of Columbia, the Department of Public Health, and the Department of Public Welfare.

Opposition to the program turned out to be less than was anticipated. A letter from the local Council for Exceptional Children, which was published in a Washington evening newspaper, described and recommended the project to the public. Resolutions supporting the program were passed by various community organizations. Following approval by the School Board, a demonstration-research grant was applied for and received from the Children's Bureau for the 3-year period, 1963-1966.

PS 004 51

Objectives and Goals

The objectives and long-range purposes of the program are embodied in the following three questions:

1. By avoiding interruption of schooling, would it increase the likelihood of return to regular school and continuance in school after childbirth?

2. Would the consistent, coordinated health care that would be provided reduce the incidence of poor pregnancy outcomes?
3. Would the girls who were served by this program be less likely than usual to have further illegitimate pregnancies, or, if they were married, to postpone later pregnancies at least until after graduation?

Location

Pressure against having pregnant girls attend classes in a building that was being used by other students led to a compromise solution: a former school building that could accommodate the students and staff as well as the school system's administrative personnel.

Some renovation was required, since the Webster building had not been used as a school for over 30 years. As refinished, the inside corridors were lined with lockers. Yellow and green paint freshened the walls. Large, multipaned windows let in outside light. Inside light came from egg-carton-style fluorescent lights which lent a modern look to the classrooms. Sidearm desks and tables with chairs provided work space for the students.

Administration and Staffing

An advisory committee consisting of some members of the original planning committee and some officers and supervisory persons from the school system and from the Health and Welfare

Departments met monthly to coordinate and assess the progress of the project and make recommendations for its improvement.

Full-time employees of the project consisted of the project supervisor, three classroom teachers and a visiting instruction teacher, three social workers, a psychologist, and a clerical worker. In addition, there was a part-time research consultant on the staff of the project.

An obstetrician, nurse, nutritionist, medical social worker, and a supervisor from the Child Welfare Division of the Department of Public Welfare were among the part-time employees.

The school was placed under the direction of the principal of the Sharpe Health School and was administered through the office of the Assistant Superintendent in charge of Junior and Senior High Schools. The principal of the Sharpe Health School, with the aid of the assistant principal, had administrative responsibility for the Webster staff. They gave direction to the organization of classes, insured curriculum standards, procured necessary supplies and equipment, established procedures for proper certification of credits earned, and set up methods for coordinating the services of the various disciplines involved in the project. The salaries of these two people were paid by the District school system.

Calendar

The regular school calendar was followed throughout the year. Classes were held between 9:00 a.m. and 3:30 p.m. A daily enrollment of 60 girls was planned. It was assumed that girls would be in the program at least 4 months, including a post-partum period of 6 to 8 weeks. This gave the school a yearly enrollment of approximately 150 girls, including those who entered during the summer. Girls were to be enrolled at any time in the year that vacancies occurred, either by students dropping out of the project or by returning to regular school as scheduled.

A full program of studies consisted of four subjects, carried as in regular school, and an 18-week "personal and family living course"; in addition there were scheduled interviews with the psychologist and social workers as indicated and medical appointments. The latter, although off the school premises, were an integral part of each student's schedule.

Education Program

The major purpose of the Webster School Project was to provide pregnant girls with an opportunity to continue their junior or senior high school education until they could return to a regular public school, usually 6 to 8 weeks post partum. To facilitate this interim educational process, the school portion of the Webster program was set up to follow the regular secondary school curriculum and procedures as closely as possible.

Minor exceptions were music and physical education, which were not offered. In place of these the public schools' standard "personal and family living course" was given in an expanded form. This course was the core of both the special educational and rehabilitative efforts of the project. The curriculum was expanded to include consideration of pregnancy, preparation of the mothering role, special family relationships, and involvement with putative fathers.

The standard segments of this 18-week course was taught by the school's regular teachers. Additional lectures and discussion sessions conducted by other staff members (psychologist, physician, etc.) supplied special information, direction, and support for program enrollees. The two chief aims of this expanded course and added personnel became: (1) to help the girls untangle their webs of fear and concern and (2) to help them build emotional and mental confidence about the physical process of becoming a mother.

Health Services

The health services provided by the project were of three types:

1. Health education in the form of instruction in the classroom by members of the staff of the District Health Department;
2. Health services to individual students given on the Webster School premises;

3. Prenatal care offered by the Health Department at maternity clinics throughout the city.

In order to encourage continuous health care, a medical appointment form to be signed by the physician from whom the girl received prenatal care was developed. It indicated the date of the visit, health recommendations, and the time of the next appointment. Although all students had to present a medical certification of pregnancy before being admitted to Webster, many did not voluntarily seek further prenatal care. The nurse counseled these girls and referred many of them to community facilities. With the aid of the medical appointment form, she was able to insure that these girls followed through and remained under care.

When a baby was born, the nurse was notified by the girl or her family. She then contacted the Department of Public Health's Field Nursing Division to request a home visit. Field nurses were given any school information that would assist them in providing good care for the girls in their homes. After the girls returned to Webster, they were interviewed by the nurse. She inquired about the results of their 6-week physical examination, their general post partum condition, and their infant's health care, and responded to the girls' questions.

Social Services

The social services included:

1. Casework with the students;
2. Casework with families and putative fathers;

3. Planning for care of the babies;

4. Follow-up social services.

1. Casework with the Students: Because of the nature of the project, the social services were aimed particularly at maintaining school attendance. The social workers offered support and encouragement to the girls and their families during the pregnancy, and with the particular aim of helping the girls remain in the Webster School during that time. They concommitantly worked on plans for the care of the baby so that girls could return to regular school following childbirth.

For many girls, the social workers provided their first opportunity to talk with a professional person about themselves and their problems.

Also, the social workers alerted some girls to employment opportunities.

In helping the girls with their varied problems, the social workers drew freely upon other sources of assistance. They referred some of them to the staff psychologist for testing and counseling. They also referred girls to community resources such as the Public Assistance Division of the Department of Welfare, Pupil Personnel in the District Schools, United Planning Organization, Juvenile Court, family agencies, mental health clinics, and neighborhood centers.

2. Casework with Families and Putative Fathers: The social workers met with the girls' parents or guardians both at the school and in their homes. Because of the smaller caseloads and more adequate staffing during the school's second year, the social workers were able to make over 600 home visits, almost four per family.

During the home visits, the social workers involved the families both in resolving some of the girls' immediate problems, such as adjustment to school, and in seriously considering plans for the future. They also attempted to help the parents develop some awareness of the factors that had precipitated the pregnancy.

The social workers also tried to work with the putative fathers or husbands. During the first school year, group meetings with films and discussion sessions were arranged. Some fathers were also seen individually.

3. Planning for Care of the Babies: The girls who kept their babies (as most of them did) had to arrange for at least 8 or 9 hours of continuous care of the infant if they were to be able to return to school. The most common solution was for either the girl's mother or a relative of the girl to take care of the baby. In some cases the putative father's family was able to assist, either in actual care or through financial help in paying for a baby sitter.

4. Follow-Up Social Services: Social services for girls after they left the Webster School were offered on a limited basis. After leaving the program, girls usually returned to the school for at least one group meeting. In addition, girls occasionally called upon the social workers for individual assistance.

This feed-back on problems of re-entering school helped the social workers in counseling other Webster girls.

Cost of the Program

The average total cost of the program was approximately $550 per pupil. Most of the expenditure was for salaries, although some unusual costs, such as building renovation and research, are included in the figure.

The expenditure involved in operating such a program may be viewed primarily as one which permits children to receive the schooling to which they are entitled. If so, the additional cost of such a program per pupil is dependent upon the kind and amount of special services provided.

Effectiveness

1. Almost all of the girls remained in Webster throughout the expected period, thus achieving one of the project's main goals, continuity. The educational, health, welfare, and psychological services were apparently well-accepted by the students and generally viewed as helpful.

The girls' academic accomplishments were adequate, at least as compared with their previous performance in school. The grade averages of only a small proportion of girls declined.

The Webster project was highly effective in promoting school re-entry following childbirth. Over four-fifths of the girls who attended Webster re-entered regular school. Their rate of return was definitely superior to that of girls who did not attend the program. Many of the girls who returned to school, however, were not able or willing to stay until graduation. The most significant factor related to school outcome was age at time of pregnancy. Older girls tended to return to school and stay until graduation. Second pregnancies influenced these school outcomes as well. Older girls were less likely to have second pregnancies, and graduates least likely of all.

2. Overall, the Webster girls had better records for outcome of pregnancy than comparable groups in the District of Columbia. The proportion of low birth weight infants, the infant mortality rates, and other indices were all better for Webster girls than for various Negro populations in the District. Indeed, the fetal death ratio almost equalled that for the white population.

This outcome is attributed to two factors: (1) early and consistent prenatal care, and (2) adult support and the feeling that they were acting constructively.

3. The Webster School's main method of preventing subsequent pregnancies was to discourage premarital sexual activity and to try to build the girls' self-image and ability to cope. The program was apparently less successful in this area than the others. Nearly half of the unmarried girls had second babies within 30 months of the birth of their first child.

Birth control was never made an integral part of the school program. This lack of strong support for birth control seems to have been self-defeating, not only with respect to reducing the number of second pregnancies, but in terms of the school's educational objective.

For some of the girls, marriage was a positive factor in reducing subsequent pregnancies. Another interesting trend, though not statistically significant because of the small numbers involved, seemed to indicate that the girls whose first baby died or was "placed" may have been more likely to have a second child than those who kept their first baby.

Recommendations

The following recommendations to the District of Columbia Public Schools and to the Departments of Public Health and Public Welfare were based on the findings of the study of the Webster Girls' School program's effectiveness:

1. Put more emphasis on serving the youngest girls. If needed services cannot be given to all students, most

11th and 12th graders might be given chiefly educational services while coordinated health and intensive social services are focused on girls of compulsory school age.

2. Establish a follow-up process to see that girls re-enter school as scheduled or as soon as is appropriate and that during the crucial first year, contact with them is maintained so as to provide the needed support.
3. Put greater effort in helping school officials, teachers, and counsellors to understand the problems and needs of returning school-age mothers. Encouraging school continuance by these girls should be seen as a total school responsibility.
4. Include in the Webster program adequate and accurate birth control information as a part of health instruction.
5. Expand the program to allow more pregnant girls to have access to it.

Reference

Children's Bureau Research Reports, No. 2. The Webster School: a District of Columbia program for pregnant girls. U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, Children's Bureau, 1968.

b. The Program for Continuing Education
Winston-Salem, North Carolina
Director of Pupil Personnel Services: Mrs. Josephine Shaffner

The Program for Continuing Education for pregnant school age girls in Winston-Salem began in 1964. It serves between 150 and 175 girls annually, and participants include the Health Department, YWCA, Education Department, Red Cross, and Family and Child Service.

Located in a former church education building, the program, in addition to the continuation of regular education, provides group and individual counseling, vocational training, instruction in child care training, personal and family living, family planning information as well as the opportunity to participate in cultural activities. As part of the nutritional basis, all girls receive free breakfast if desired.

Certification of pregnancy by a doctor, parental and/or husband's consent, plus motivation to attend regularly are requirements for admission into the program.

Girls return to the program 3 weeks post partum and remain until the end of the school year. Arrangements are made by the program for the girls' transfer back into school. Girls who come to the program as seniors are graduated from the program, but the diplomas they receive are from the school from which they came.

Replication

Further information may be obtained from Mrs. Shaffner at Winston-Salem/Forsyth County Schools, P.O. Box 2513, Winston-Salem, North Carolina 27102.

c. Polly T. McCabe Center
New Haven, Connecticut
Director: Phillip H. Sarrel, M.D.

Teenage girls pregnant out of wedlock in the City of New Haven are served by a comprehensive program of medical, educational, and social work care. Between 70 and 80 girls are served annually, and participants include the Health Department, Yale University, the Education Department, Community Action Group, religious organizations and voluntary agencies.

The experimental program began in September 1965 when a special prenatal clinic for young mothers was started at the Yale-New Haven Medical Center. In December 1966 a school, the Polly T. McCabe Center, was opened to provide an educational-recreational program to work with the hospital program. The two programs function as one, with constant communication and service interaction between the staffs of both centers.

The entire program, encompassing continuation of regular school, health care, social service, and basic research, is a direct attempt to stimulate the girls' desire for achievement of further education and of new vocational, familial, and social roles.

The program attempts to regulate the care of the young patients so that all girls are seen weekly for prenatal care by the same obstetrician at a time which does not conflict with school hours or with the hours of the other clinics.

Social work services for the girls are coordinated by social workers working with day center personnel and neighborhood workers. The Visiting Nurse Association's nurse discusses medical care and pediatric care with the girls 2 hours a week in addition to coordinating VNA services.

Following delivery, the girl returns to the program for 2 weeks and after approximately one more week is transferred back into regular school. Two afternoons a week the obstetric resident sees those patients he has delivered for post-partum follow-up. During the same time the social workers see the girls for individual casework.

A weekly in-service training program held for teachers at the school is conducted by the hospital's psychiatrist, pediatrician, and obstetrician. Bimonthly meetings for the entire staff, research and service groups, focus on research teaching, relationship of program to community, and ideas for further development. There are also monthly meetings of a steering committee.

Replication

Details of the New Haven Program may be obtained from Dr. Sarrel, in care of the Department of Obstetrics and Gynecology, Yale University School of Medicine, 333 Cedar Street, New Haven, Connecticut 06511.

Those communities particularly interested in preventive measures are encouraged to refer to the program description, "High School Courses for Future Parents," which appears in Part I of this manual.

2. Health Policy and Procedures in a Day Care Center

a. The Institute for Child and Family Development
The University of North Carolina at Greensboro
Director: Mary Elizabeth Keister, Ph.D.

Dr. Mary Elizabeth Keister describes health measures taken in her outstanding day care center at the University of North Carolina in Greensboro, North Carolina.

Health and Sickness in the Nursery

One day, some two years ago now, when we were looking over our new quarters in the church and preparing to admit our first babies, Dr. Ford, our Pediatric Consultant, said to us, "You know, I'm not at all sure this room will be adequate for Sick Bay. You realize, don't you, that there may be days when all the babies have to be in Sick Bay?"

No one is more pleased than Dr. Ford herself to have been proved dismally wrong on this point. The low rate of illness and absenteeism among our babies has been gratifying. This encouraging record can be credited in part to Dr. Ford's interest in the program. Her wise and sensitive supervision, and her continuing availability for consultation.[1] In large part it also stems from a rather meticulous conforming to the regulations we have established for staff and parents to

---

[1]During the first year of the project, Dr. Ford consulted on a four-hour-a-week basis; at present she gives us two hours a week of consultation time.

protect the health of the babies. (More of this later. See Quality in Health Care below).

Daily records are kept by the Nurse on each child's state of health. We are beginning an analysis of these records and find the results encouraging. Even in the months with the "worst" health histories (November and February, April and June), fewer than one-fifth (20%) of all possible child-attendance-days were days with children sick in the Nursery. Upper respiratory infections accounted for the most time spent in Sick Bay - 7% of possible attendance days; and gastro-intestinal disorders were responsible for 1% of the possible attendance days being spent in Sick Bay.

We would emphasize and support the well-founded anxiety of medical authorities (and of many parents) that to care for babies in groups is to expose them to numerous hazards to health. Only the most meticulous attention to details of staff health, handwashing, toy washing, floor cleaning, and other environmental safeguards will result in a milieu safe for the physical health of infants and toddlers.

No one, no agency or individual, who undertakes to care for a number of very young children together has a right to relax for one minute the precautions that will protect their physical health.

Quality in Health Care

One further important point about quality in our model for all-day care: what we do to protect health and to keep children

safe. We feel strongly that children in the vulnerable under-three age should never be brought into a group-care situation unless the sponsoring agency is prepared to provide them the best of what is now known about health protection and safety.

Perhaps the prime requisite is a healthy staff. All our staff (from cook through Nursery Assistants to janitor and director) must present annually a physician's statement of satisfactory health status and a chest x-ray report. No adult is permitted to be in contact with the children if he/she has an upper respiratory infection or a gastro-intestinal disorder.

Meticulous handwashing we regard as the single most important precaution that can be taken to protect health. We are rigid in our requirement that hands be thoroughly washed after every diapering and before feeding a child. We teach our toddlers and two- and three-year-olds to wash hands after toilet, after play outdoors, and before eating.

Those who work with the children wear washable uniforms in soft colors, fresh every day. And the assistants who are with the infants put on top of this dress a colorful, soft "patient gown" when holding babies. For each baby, there is put each day in his/her personal storage box, a fresh "patient gown" that is worn by the caregiver when she feeds or holds that one baby.

We make use of the local diaper service. Frequent changes of diapers and use of caldesene powder has held diaper rash to the status of a minor problem.

Interestingly, we believe that having the Sick Bay has reduced rather than increased the incidence of illness in the Nursery. We regard our provision of Sick Bay as one of the important facets of the demonstration. We are told by employers that for many women the final decision as to whether to accept gainful employment rests on the plans they are able to make for the care of their children when sick. When a mother in a low-income-producing job must stay home with her sick child, it means loss of needed income; for a mother in a professional position it often means delays, dissonance, or set-backs in important work and/or extra burden on her co-workers. If a Sick Bay can be shown to be feasible, this would be a tremendous contribution to the whole field of day care.

A common sense assumption could be made that both duration and severity of illness in young children could be reduced by competent nursing care in the very early stages of illness. If a mother need not worry about missing time from her job, she will more readily cooperate with the Center in reporting symptoms she has observed and thus a child's illness may be "caught" and treated in the early stages. Quiet play, extra rest, warmth, controlled humidity, meticulous administering of any medication, the familiar and favored caregiver to provide an interesting waking time, all contribute to the baby's recovery and the mother's comfortable assurance that

he is being adequately cared for. We are accumulating records that should contain evidence as to whether this is indeed the case and whether the cost - in money, in staff, and in space and equipment required - is reasonable. Other infant care projects need this kind of information to make intelligent decisions about the benefits to babies and the feasibility, usefulness, and cost of a Sick Bay.

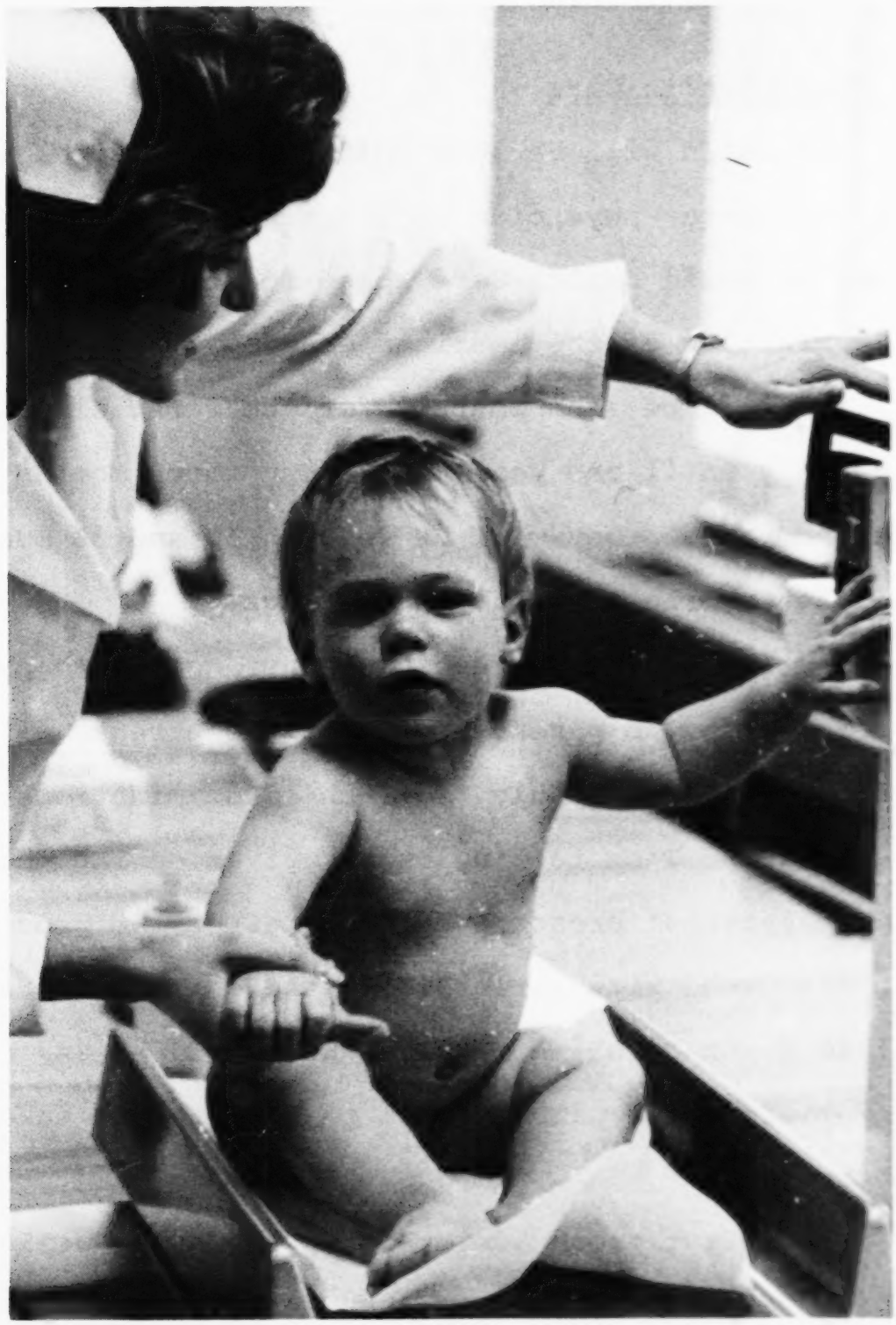
We have made a conscious effort to use Sick Bay - and in fact <u>all</u> the contacts our children have with the nurse and doctor - as a learning experience. We find gratifying our young ones' friendly, accepting attitudes toward persons who wear white uniforms and/or stethoscopes, their positive attitudes toward taking medicine, their interested cooperation in physical examinations and in first aid treatment. Children as well as staff practice "techniques" of wiping noses, sneezing and coughing, that protect rather than expose others to the hazards of infection.

<u>Replication</u>

The education phase of this day care program is described in Part I of this series. The nutrition program is described in Part II. Dr. Keister and her staff have prepared a packet of materials which should be helpful to program planners and operators.

Reference

Keister, Mary Elizabeth. The Good Life for Infants and Toddlers. The National Association for the Education of Young Children. Washington, D. C., 1970.



b. Frank Porter Graham Child Development Center
The University of North Carolina at Chapel Hill
Former Medical Director: Ann DeHuff Peters, M.D.

Dr. Peters enumerates the medical policies of the Frank Porter Graham Center in a way that should help planners develop guidelines for policy and operations.

Routine Child Health Care

1. The child will be seen for regular physical examinations by the Center physician on the schedule suggested in "Standards of Child Health Care" prepared by the Council on Pediatric Practice of the American Academy of Pediatrics. The children will be seen monthly for the first six months, then bimonthly until one year, and every three months during their second year. They will be seen at 30 and 36 months of age, and then yearly until 6 years of age.

2. Routine medical care will be arranged with prior consultation with the parents. One of the parents will be expected to come to scheduled well-child examinations. Immunizations and Tine testing can be given during the day without the parents' presence but only after the procedure has been discussed with parents. If the child requires referral to North Carolina Memorial Hospital, or any other medical facility, the parents will be expected to take the child there.

3. The infant group admitted to the Center will also be seen by the Research Nurse from the Center on the same schedule

of visits as the Center physician. These examinations will be done in the home with at least one parent present.

4. The schedule of immunizations which will be followed as closely as possible is the schedule suggested by the Report of the Committee on the Control of Infectious Diseases of the American Academy of Pediatrics in 1966 with slight modifications.

6	weeks:	DPT and trivalent OPV
3	months:	DPT and trivalent OPV
4	months:	DPT and trivalent OPV
10	months:	Tine test
12	months:	Measles vaccine
15-18	months:	DPT and trivalent OPV
12-24	months:	Smallpox
24	months:	Tine test
36	months:	DPT - Tine test
4	years:	Tine test
5	years:	Tine test
6	years:	TD - Smallpox - OPV - Tine

5. Height and weight measurements will be obtained monthly by the Operational Staff.

Procedures for Care of the Ill Children

1. The R.N. who directs the Operational Staff will be in charge of coordinating all medical care for the children, and all referrals to the physician except emergencies must come through her. In her absence another member of the Operational Staff with nursing experience will have this responsibility. At the present time Mrs. Land has this responsibility and Mrs. Bynum is in charge in her absence. It is most important that this procedure be followed to avoid duplication of effort, serious failures of communication within the Center and with the parents, and, most importantly, confusion in the care of the sick child.

2. It is at the discretion of the Operational Director or her deputy whether she wishes to bring a child to the physician's attention. Her decision will be based entirely on the needs of the child since she will not be participating in the medical research program.

3. At the present time the following guidelines are suggested for seeking the physician's advice in the care of the sick child: (1) Any child with a temperature greater than 102° rectally or 101° orally. (2) Children with the following symptoms regardless of temperature: (a) marked lassitude or irritability; (b) respiratory difficulty as indicated by rapid breathing, rapid pulse or retractions; (c) severe nasal congestion or cough which interferes with normal sleeping or feeding; (d) pulling at ears or complaint of ear pain; (e) acute abdominal pain; (f) diarrhea; (g) acute skin rash; (h) repeated vomiting; (i) pain or difficulty with voiding; (j) bone or joint pain; (k) persistent changes in mental status following an accident; (l) accidents at the Center involving ingestions, burns, or significant lacerations.

4. Children who have medical problems on morning admission will be seen by the Operational Director or her deputy. If it is thought necessary for the child to be seen by the physician, it should be done prior to the start of the educational program. The physician will usually be available from 9 until 10 in the morning for this purpose.

The Education Staff will be informed of any necessary special care by the Operational Staff.

5. Children who develop illness during the day or whose symptoms become worse should be seen between 3:30 and 5:00 unless immediate attention is required. Arrangements for the child to be seen should be made through the secretary in the medical trailer. If these symptoms develop while the children are in the care of the Educational Staff, they should contact the Operational Director or her deputy for directions.

6. At night and on week ends the parents are to contact Dr. Loda if illness occurs. If he is not available they are to contact the Emergency Room at North Carolina Memorial Hospital. Patients with acute respiratory disease will be cultured as early in their illness as possible for viruses, mycoplasmas, and bacteria.

7. The Center physician will see a child whenever he is requested to do so by a parent. Such requests will usually come through the Operational Director, and she is encouraged to discuss the cause of the parents' concern with the parent. In many cases after this discussion referral to the physician will be unnecessary, but if either the nurse or the parent still feels the physician should see the child, then referral will be made.

8. The nursing staff may give aspirin to any child over 6 months with a temperature of 101° oral or 102° rectal without

consulting the physician. Infants from 6 months to 24 months of age should be given 1 "baby aspirin" (75 mgm). Children over 2 years can be given 2 "baby aspirin" (150 mgm) at a time. These doses may be repeated in 4 hours. Non-medicated cough preparations also may be given. Any other medications should be given only after written instructions from the physician. Under special circumstances, they can be given temporarily after verbal instructions, until written instructions are available.

9. All medications given in the Center will be administered by the Operational Director or someone specifically appointed by her. All drugs will be kept in a locked cupboard, and a daily medication sheet will be posted on the door of the cabinet. The recipient, the time, and the amount given must be recorded on the daily medication sheet every time a medication is given. Record will also be made on the medication sheet of the child's permanent nursing record each time a medication is given. The parents will be given written instructions by the physician on night medications.

Admission and Isolation of Children
With Specific Infectious Disease Problems

1. The general policy of the Center is to admit children to the day care center whenever possible, and they will excluded only when it is felt that admission poses a definite problem either in the care of the ill child or a serious risk to other children in the Center. Such circumstances are expected to arise on very few occasions.

2. Children with respiratory illnesses will be admitted to the Center. Care will be taken to dispose of materials contaminated with nasal secretions, and ill older children will be kept away from intimate contact with infants. Sick children will be provided with a quiet place within the center where they can rest and sleep during such illnesses, and in this way they will partially isolate themselves from intimate contact with the other children.

3. Children with gastro-intestinal illnesses will be admitted to the Center. Cultures will be obtained promptly to establish any treatable bacterial etiology, but anti-bacterial therapy will be reserved for specific clinical indications and no effort will be made to treat "positive cultures", as there is evidence this increases, rather than reduces, the likelihood of carrier states. However, with early culturing swift measures can be instituted if a particular organism produces an epidemic situation. As in the case of respiratory illness, ill children will tend to isolate themselves, and children with diarrhea will be kept away from the infants. The high level of sanitation, usually observed, will be scrupulously maintained when dealing with a child with gastro-intestinal symptoms.

4. All children will be immunized for measles at one year of age with live virus vaccine. Maternal antibody should prevent illness in most infants below the age of one year. The level of immunization in the community should further reduce

the possibility of the occurrence of measles in the few infants at risk before their immunization at age one year. However, in the unlikely event a child should develop measles he or she will not be admitted to the Center until 6 days after the appearance of the rash.

5. Children with chicken pox will be excluded from the Center for 6 days after the onset of the rash. This is done because this disease is so infectious that the entire population of the Center would probably be ill 2 weeks later if the ill child was not excluded. The problem of adequately caring for such a large group of children simultaneously ill would limit the quality of care and unnecessarily increase the hazard of complications. This question will be reviewed when more adequate facilities for care are available within the Center and a higher proportion of the children have natural immunity.

6. Children with mumps will be admitted to the Center. Virus is shed up to 7 days prior to onset of clinical disease which reduces the value of isolation or exclusion. A high number of susceptible individuals have subclinical infection, and the rate of transmission is not as high as with measles or chicken pox, so the problem of management should not be overwhelming. The disease is also less severe in children than adults. For all these reasons children with mumps will be admitted if their parents wish to bring them to the Center.

7. Children with exanthems believed to represent rubella will be admitted. Clinical diagnosis is so inaccurate in these

conditions that it would be impractical to do otherwise. The disease is so mild in the children it should not represent a care problem and contact with the disease in childhood is probably desirable.

8. Steps will be taken to protect non-immune staff members from exposure to mumps, chicken pox, and rubella. In case of mumps and rubella where clinical histories of prior infection are of limited value, serologic tests will be performed to see which adults are at risk. As effective, live vaccines become available for mumps and rubella, their use will be encouraged for staff members who do not have serologic evidence of past infection.

Replication

Dr. Peters, who presently resides in La Jolla, California, is no longer associated with the Frank Porter Graham Center. She has contributed a chapter to the useful book on dav care entitled Early Child Care: The New Perspectives, by Caroline Chandler et al. (See Bibliography).

Reference

Unpublished material available from the Frank Porter Graham Child Development Center and personal communication.

B. COMPREHENSIVE HEALTH PROGRAMS

1. Maricopa County Health Department
Maricopa County, Arizona
Director: Pearl Tang, M.D.

A major criticism leveled at health care for the poor is that it is so fragmented. An excellent program in and around Phoenix, Arizona, meets this charge head on. The Maricopa County Health Department endeavors to:

1. provide comprehensive health services to all residents of Maricopa County and to
2. coordinate the available services for the convenience of the consumer.

Dr. Pearl Tang administers the program in Maricopa County, a 9200-square-mile area, which contains such diverse elements as the metropolis of Phoenix and Indian reservations. "We are proud to be able to tie our programs together," Dr. Tang reports. She has enlisted the cooperation of the personnel of the city/county health department, county hospital (located in Phoenix), Migrant Health Program, Office of Economic Opportunity health services, Public Health Service, the Maternal and Infant Care Project and the Children and Youth Project.

What does such coordination mean for the consumer? In both metropolitan and rural areas, most services are located in the same building. A mother may bring her young children to a Family Health Clinic and in the course of one morning she may receive prenatal or family planning care; one child may receive a well-baby examination during which he is immunized,

and another child may receive dental care. "If they are sick, they get treatment," Dr. Tang adds. This commitment to serving all people is shown in the attention paid to all possible impediments to connecting the people who need services with the service.

In order to meet the special needs of the rural areas, health care teams and their trailers of equipment are sent out to the country. The teams and their trailer units move from place to place demonstrating the value of health facilities. After the visit of a trailer team, several communities have donated a building in which materials and personnel can be permanently located. The trailer teams have visited migrant work camps as well as reservations. At least 160 clinic sessions are held each month in thirteen to nineteen different locations, mostly indigent areas. In 1969, 30,180 people were seen.

Manpower

The team consists of a physician, nurse, dentist, nutritionist, social worker, and several health aides. Traditionally, it has been difficult to recruit physicians for jobs in which they may spend three hours a day traveling in Maricopa County. This has been alleviated by the cooperation with the Public Health Service.

Health aides, who have been used successfully in many projects, are trained by the local technical college. Special

follow-up training is geared to the needs of the specific program in which the aide is placed. The aides are encouraged to assume duties and responsibilities in connection with the services they have been trained to provide.

Services

The medical services include a Maternal and Child Health Center which includes six major programs: maternal health services, child health clinic, family planning clinic, cancer screening clinic, school health clinic and hearing clinic. In addition, there are active programs in the following areas:

1. Tuberculosis control

2. Preventable diseases
3. a. Venereal diseases
   b. Communicable diseases
   c. Immunization clinic

3. Other clinic services
   a. Out-patient clinic
   b. Migrant family health clinic
   c. Migrant summer physical examination
   d. Heart clinic
   e. Glaucoma clinic
   f. Psychiatric registration

4. Mental retardation

5. Dental health

6. Nutrition services

7. Social services

8. Environmental services (pollution, sanitation, etc.)

9. Supporting services (laboratory, vital statistics).

Additional information follows for four major child health services.

1. The Children and Youth Project

One of 57 similar pilot projects throughout the nation funded by the Children's Bureau, the Center opened early in 1968. Housed in a remodeled former fire station, the Health Center facilities are supplemented by a lab X-ray trailer and two dental trailers, one of which circulates among the three elementary schools in the one-square-mile project area. The project offers comprehensive health services to approximately 2990 children up to age eighteen who meet financial eligibility requirements and who reside within the boundaries of the designated area in South Phoenix. The health team of pediatricians, public health and clinic nurses, health aides, laboratory X-ray technician, nutritionists, social workers, psychologist, pharmacist, dentists, dental assistants, and hygienists, and clerical personnel direct their combined efforts towards restoring each child's physical and emotional health and keeping him and his family at this level.

2. Head Start Health

Head Start youngsters, preschoolers being prepared for educational and social adjustment to the first grade, attend special Health Department clinics throughout the county. Each child receives a complete medical examination, including vision screening, hearing testing, immunizations, and emergency treatment. Provisions are made for counseling and follow-up treatment of defects detected in the course of this medical examination. Each child is also scheduled for complete

dental care at the office of a private dentist. 2037 youngsters participated in the medical and dental portions of Head Start during 1968.

3. Knowledge Booster Programs

Health and educational projects for elementary school age children from disadvantaged migrant families were held in the communities of Tolleson, Cashion, El Mirage, and Guadalupe during the summer months of 1968. Many migrant youngsters become school dropouts by the fifth grade level. The Knowledge Booster Programs offer preventative and curative medical and dental services in addition to special guidance for improving classroom performance, to remove handicaps stifling achievement and to thereby enable youngsters to remain in school. The Health Department's Migrant Project staff supplied the medical and dental services for the 784 children participating in the program.

4. Maternal and Infant Care

Prenatal care is arranged through the maternal and infant care project. Because of the close coordination, a public health nurse can assume continuance of services soon after the birth of the child. The information she needs is centrally located as are former staff who are familiar with a specific patient. In the case of a premature or other identified "high risk" baby, the public health nurse arranges for continuance of service before the baby is released from the hospital.

Follow-up treatments, particularly hospitalization and dental care, are provided under a variety of programs which are financed both federally and locally.

The programs have been very effective in reaching a large number of rural dwellers who had been neglected. Further, the mobile units which gave rise to permanent health facilities with skeleton staffs are the basis for an improved system of health care delivery.[1]

Replication

Funds for Maternal and Infant Care and Children and Youth projects should be investigated through the Department of Health, Education, and Welfare. Information about details of arranging coordination in Maricopa County may be obtained from the Maricopa County Health Department, Office of Public Information.

References

Maricopa County Health Department. "Health Blooms in the Desert: an Annual Report." Arizona: Maricopa County Health Department, 1968.

[1]See the program description of the Vanderbilt Medical and Law Students Summer Project.

2. Maternal and Child Health Division
West Virginia Department of Health, Charleston, West Virginia
Director: Jack Basman, M.D.

The West Virginia State Department of Health now operates two mobile health units which provide six medical services specifically related to maternal and child health:

1. Head Start physical examinations;
2. Preschool exams in conjunction with the Maternal and Child Health programs;
3. Vision and hearing screening;
4. Immunizations;
5. Pap smears;
6. Family Planning services and education.

In addition, the State Department operates two other mobile units, one for dental services and another for tuberculosis control.

The mobile health units have offered the following advantages:

1. Patients do not need transportation;
2. There is no expense in renting for Health Department;
3. It is possible to reach a scattered population, many of whom could not otherwise reach the services;
4. Patients do not need special clothing or babysitters;
5. There is very little "bench time";
6. The Health Department has taken the lead in bringing the service to the people or, as Dr. Basman says, "...the mountain to Mohammed."

The Department reports the most success when they locate the units near supermarkets, schools, and churches. It is then possible to utilize these places as additional waiting rooms if needed.

When the screening procedure reveals a problem, the patient's record is referred to the County Health Officer and

the County Health Nurse. These people are responsible for directing the patient to a clinic, agency, or private physician for treatment. Out of the 10,134 people examined in the 11-county area, 2,756 defects were found and these patients referred for treatment.

The mobile unit has been able to manage most roads. An additional $8000 to $10,000 is being provided for transportation to the Family Planning Clinics from small isolated communities which even the mobile van does not reach. Station wagons and small Dodges will be used for this transportation.

The clinic facility is a custom-built, all-aluminum bus unit. It features a complete examination room, reception room, laboratory with refrigerator and autoclave, and a pullman lavoratory. Completely self-contained, it can operate either from local power and water supply sources or from its own gasoline-operated electric generator and installed water system whenever these services are readily available. The unit is well-insulated and has installed air conditioning and heating systems.

The unit costs about $30,000 complete. It can be purchased from Lyncoach and Truck Company, Inc., Oneonta, New York. The $20,000 price of the unit refers to the cost in 1962 when the first unit was purchased. Inflation, correction of a few minor flaws, and inclusion of the generator and autoclave account for the total of $30,000 rather than the stated $20,000.

A manpower shortage continues to be the major problem both in staffing mobile units and setting up stationary health units. As a response to this problem, Dr. N. H. Dyer, State Director of Health, is presently planning a unique approach to implementing comprehensive care in Clay County, West Virginia, which presently has one physician, who is 80 years old, and no hospital or health facility.

He would like to establish a public health center beginning with a staff of 2-3 nurses. One nurse would serve as an information and referral service and will be able to draw on the manpower and resources of Charleston, 30 miles away. The other nurse would coordinate activities with a travelling team from Charleston. The team, which would consist of a physician, a sanitarian, a public health educator, and several nurses, would travel to Clay County each day and operate a clinic 8 hours a day, 5 days a week. The facility would be located in a renovated building.

Replication

States with similar manpower problems may want to try a mobile van unit, which can be a valuable asset to the health care delivery system. Details can be obtained from Dr. Jack Basman, Director, Maternal and Child Health Division, West Virginia Department of Health, Charleston, West Virginia. Those interested in the outcome of Dr. Dyer's experiment in Clay County can reach him at the State Department of Health, also located in Charleston, West Virginia.

3. Maternal and Infant Care Project
Department of Public Health, the District of Columbia
Project Director: Edward R. Wernitznig, M.D.

One of 53 such projects sponsored by the United States Department of Health, Education, and Welfare, the Maternal and Infant Care Project is coordinated by the District of Columbia Department of Public Health. 45,000 women and children receive services annually in fifteen locations. The resources of seven different hospitals are used for special maternity and child health needs as well as for distributing birth control information and devices. Federal programs of the Department of Health, Education, and Welfare, the Office of Economic Opportunity, and the Department of Agriculture are utilized and coordinated.

Primary responsibility for the delivery of care rests on a team of exceptional nurses. An outstanding "Guide for Maternal and Infant Care Nursing" was prepared for use in the project by Mary Helen Carroll, Clinical Specialist in Maternity and Newborn Nursing, and Diane G. Bruce of the Maternal and Infant Care Project.

The material in the guide is available to provide easily accessible background information in maternity and newborn nursing. Included are outlines and worksheets for Prenatal Counselling (Scope and Responsibilities, Nutrition), Home Visits, Exercises, Waiting Room Conferences, Current Hospital Maternity Rates, Postpartal Evaluation, Birth Control Counselling,

Layettes, Infant Appraisal, Infant High Risk Code, and Evaluation of the Newborn (Apgar Scoring System).

Waiting Room Conferences have been used with particular success in the District project. It is felt that group counselling not only saves repetition but provides an opportunity for mothers to learn from one another, and for nurses to hear some of the misconceptions which may need correction or guidance. The six-week course covers the following topics:

1. How Your Baby Grows
2. Changes in Pregnancy Discomforts
3. Nutrition: After-Pregnancy Complications
4. Labor and Delivery
5. Infant Care
6. Postpartal Care and Family Planning

Presentations, group discussions, and the showing of films help establish a "neighborhood" feeling among the group.

With the help of the directors of the District Program, the following guidelines for examinations for mothers, infants, and young children were developed for the Mayor's Task Force on Health. They are attached for your convenience.

Replication

The Division of Maternal and Child Health of the Department of Health, Education, and Welfare encourages comprehensive programs such as the ones operating in the District and in Kentucky. Consult the nearest Regional Office of the Department for details on program development, operations, and funding sources.

Guidelines for Planning and Recording a Visit on a Medical Patient

1. Chief Complaint - status of

2. Vital Signs:
   TPR
   Blood pressure

3. Symptoms:
   Adjustment to pregnancy
   Appetite
   Bowel habits
   Urinary problems
   Sleep habits
   Personal sanitation
   State of mental health

4. Medication Check:
   a. Kinds
   b. How often taken
   c. How much medicine left
   d. Understanding of medication and how it is taken

5. Nutrition:
   History of
   Recommendations for change
   Basic 4 food groups
   Understanding of special diet

6. Other Problems:
   a. Housing
   b. Finances
   c. Other agencies involved
   d. Family's adjustment to pregnancy

7. Return Appointment to the Health Center or PSLH:
   Appointment
   Time
   Assistance needed

8. Record Reasons For Not Carrying Out Above Nursing Care

Guidelines for Planning and Recording a Postpartum Visit

1. Mother
   a. Vital signs
      1. Blood pressure
      2. TPR

   b. Symptoms
      1. Lochia
      2. Breast enlargement
      3. Fundus
      4. Episiotomy
      5. Pain - leg, back, perineal, abdominal
      6. Headache
      7. Fatigue - excessive

   c. Nutrition
      1. History - if not previously taken
      2. Diet for nursing mother
      3. Recommended changes
      4. Four basic food groups

   d. Six-week check-up
      1. Appointment date
      2. Location

2. Baby
   a. Vital signs

   b. Symptoms
      1. Cry quality
      2. Color
      3. Skin turgor
      4. Cradle cap
      5. Thrush
      6. Cord
      7. Circumcision
      8. Feet
      9. Activity
      10. Reflexes - startle, etc.
      11. Bowels
      12. Urine
      13. Diaper rash

   c. Nutrition
      1. Nutrition history
      2. Recommended changes
      3. Formula demonstration
         a) by CHA
         b) by mother

Guidelines for Planning and Recording a Newborn Infant Visit

1. Vital Signs

2. Symptoms
   a. Appetite
   b. Cry
   c. Color
   d. Skin
   e. Activity
   f. Eyes - bright, dull
   g. Ears - sensitive
   h. Cradle cap
   i. Mouth - teeth, thrush, throat
   j. Neck - supple
   k. Navel - hernia
   l. Abdomen - tender
   m. Perineum - penis, or labia clean
   n. Diaper rash
   o. Feet
   p. Bowels
   q. Urine

3. Growth and Development
   a. Raising head
   b. Raising head and chest
   c. Reaching for object
   d. Rolling over
   e. Sit with support
   f. Sit without support
   g. Teeth
   h. Creeping
   i. First words
   j. Crawling
   k. Stand with support
   l. Walk
   m. Stand and walk without support

4. Nutrition
   a. History of
   b. Recommended changes
   c. Vitamins

5. Other Problems
   a. Housing
   b. Financial
   c. Other agencies working with family

6. Return Appointment to Health Center

7. Record Reasons Why Above Nursing Care Was Not Given

Guidelines for Planning and Recording a Child Health Visit

1. Vital Signs

2. Symptoms
   a. Appetite
   b. Color
   c. Skin
   d. Activity
   e. Eyes - bright, dull
   f. Ears - sensitivity
   g. Hair
   h. Nose - running
   i. Mouth - teeth, lesions, throat
   j. Neck - supple
   k. Navel - hernia
   l. Abdomen - tender
   m. Perineum - rashes
   n. Bowels
   o. Urine

3. Growth and Development
   a. Feeding self
   b. Walking alone
   c. Running
   d. Walking up or down steps
   e. Jumping
   f. Negative 2's
   g. Imagination
   h. Parallel play
   i. Play with other children
   j. Skipping
   k. Swinging

4. Nutrition
   a. History of
   b. Recommended changes
   c. Basic 4 food groups

5. Return Appointment to Health Center
   a. Date
   b. Medications if any

6. Other Problems
   a. School adjustment and attendance
   b. Housing
   c. Other agencies involved
   d. Finances

7. Record Reasons Why Above Nursing Care Was Not Given

4. Maternal and Infant Care Project
Kentucky Department of Health, Frankfort, Kentucky
Director: Jorge Deju, M.D.

The Kentucky Department of Health established the Maternal and Infant Care Project in the mid-1960's in five eastern Kentucky counties. Services were initiated for Bell and Harlan counties in 1963 with Floyd, Letcher and McCreary counties being added in 1965. These counties were selected as having the greatest need for the project.

The Kentucky Maternal and Infant Care Project was established for four major purposes:

1. To protect the health of high risk pregnant women and newborn infants through a program of comprehensive health and medical services.

2. To reduce maternal and infant mortality rates.

3. To reduce the incidence of infant prematurity.

4. To reduce the incidence of birth defects and mental retardation attributable to inadequate prenatal care and complications at birth.

The project varies from county to county depending upon local resources and needs. Generally speaking, it must be approved by the county health officer, the county health department and the county medical society. Project services are coordinated through the county health department, clinics, hospitals and private physicians. Participants must meet two eligibility requirements: they must be considered high risk according to the above criteria and family income must not exceed the level set by the project.

Pregnant women enrolled in the project receive complete medical examinations, laboratory tests, prescribed medications as needed, assistance with diet during pregnancy, dental services, complete delivery and hospital services including transportation, postnatal examinations, care for their children and referral for additional services as needed. Prior to her delivery, a mother attends a maternity clinic. The nurse who attends her at a project-accredited hospital at the time of delivery makes follow-up visits to the home to insure that the infant is receiving proper care and nutrition and is developing normally. Well-baby and pediatric clinic services are also provided for these infants in addition to the regular home visits made by project nurses.

Social workers and nutritionists are affiliated with the project in several counties. There is a great need among high risk mothers for assistance in handling emotional and economic family problems. Homemakers have been placed temporarily in some homes to relieve stress brought about by deprived and overcrowded living conditions. Often a family needs help in obtaining public assistance for which they are qualified. In one county (McCreary), project services have been extended to include the medically indigent because nothing else is available.

While mothers are in the hospital and at the time of follow-up visits, they are encouraged to use some form of contraception as a preventative health measure for themselves

and their present as well as future children. Family planning information is given only to project mothers. However, the illegitimacy rate among teenagers in project families is high and rising. Because very young, unwed mothers and their infants are a high risk group, there is a great need to curtail the number of these births and to provide more adequate prenatal care to such prospective mothers.

The job of a nurse with the Maternal and Infant Care Project is a grueling one, especially on those days when home visits are made over almost impassible roads into very isolated areas. Passivity and lack of cooperation on the part of many mothers is a source of continuing frustration, even though many participants have visibly improved their health practices as a result of the project. Most of a nurse's efforts with a family consist of explaining and demonstrating care and feeding techniques and checking on later visits to determine if the mother is actually following instructions. Regular examinations of mother and child are done at home as well. Often a nurse will notice older children in the family who need to be examined because they show signs of malnutrition, neurological impairment or other health problems requiring attention. In this way the nurse's visits contribute to better health for the entire family.

During the past fiscal year (1969-1970) a staff of 25 persons, 13 of whom are nurses, provided project services in five counties to 1,500 families. Last year's budget totaled

$461,900, with seventy-five per cent matching funds provided by the Federal government through the Children's Bureau as part of the national Maternal and Child Health programs. This averages out to a per family cost of approximately $300 a year.

The effects of the project are measurable. The number of hospital deliveries is up while the incidence of infant mortality is down. No mothers in the project have died in childbirth. The rate of prematurity has shown the least change because most of the mothers are still high risk despite increased prenatal care and supervision during pregnancy. The number of midwife deliveries is down. There is increased interest in infant care among mothers having children in these areas.

There is no doubt that the preventative aspects of this project could be greatly increased if more effective ways of enlisting the mother's cooperation in following medical and child care instructions could be found. More effective coordination between the project and other family service and welfare agencies is needed to combat those hardships which make it difficult for many mothers to believe they really can do anything to improve their lot.

Replication

Those communities interested in establishing maternal and infant care services should contact the State Department of Health, Division of Maternal and Child Health, in order to learn more about the program and the procedures required to extend its services.

5. Maternal and Infant Care Projects
Department of Health, the City of New York
Office of Director, Maternal and Infant Care Projects

The Maternal and Infant Care Projects of the Department of Health of the City of New York, were started in 1964, with a grant from the United States Children's Bureau. This grant was made possible through legislation which authorized appropriations of federal funds under the 1963 Maternal and Child Health and Mental Retardation Amendments to the Social Security Act.

The purpose of this legislation was to reduce the incidence of mental retardation caused by complications associated with childbearing. Thus, the primary objective of this project is to improve the health of expectant mothers and potential mothers, and to provide a high quality of comprehensive maternity care with special emphasis on women living in low-income areas.

The basic standards of service were set by the legislation and by the Children's Bureau, emphasizing that medical arrangements must provide for comprehensiveness, quality, and continuity of care, during the prenatal, labor and postpartum periods. Although maternity care was always available in New York City, overcrowding, impersonal care, and inaccessible facilities caused many New York women to receive no, or late, prenatal care. The Maternal and Infant Care Project services

were designed to bring the care to the patient. There are no geographic restrictions. All prenatal and family planning care is provided without charge to the patient.

To date, this NYC-M.I.C. Project is one of the largest of 53 similarly funded Maternal and Infant Care Programs in the country. The NYC program started out with two Health Department Maternity clinics. Currently, prenatal, postpartum, and family planning care is being provided in 12 Health Department District Health Centers. Additional family planning care is provided in 10 other related sub-centers which are located in Child Health Stations. This adds up to a total of 22 areas where the program provides patient services, covering the boroughs of Manhattan, Bronx, Brooklyn, Queens, and Staten Island. Through these facilities, the Health Department is providing care to 13,000 new prenatal patients per year, and will probably provide care this year to 20 per cent of all service maternity patients in the city.

Each one of the 12 Health Center maternity services is set up in close relationship with one affiliating hospital where the patients will be delivered. In other words, we have 12 separate affiliation programs. At the present time, the M.I.C. Projects are affiliated with 10 voluntary and 2 municipal hospitals. The medical records used in providing prenatal care are those of the affiliated hospital. They are brought to the Health Center for the duration of the clinic session. They are then returned to the hospital so that they

are available at the time of labor or in the event of an emergency admission.

All 22 Health Department maternity care centers are managed and coordinated through the central office of the M.I.C. Projects. Personnel, such as public health nurses, social workers, nutritionists, and all ancillary personnel are recruited and employed by the M.I.C. Projects' central office and assigned for work in one of the 22 centers. However, the obstetrical care provided in <u>each</u> of the centers is under the supervision of the Director of Obstetrics and Gynecology of each specific affiliated hospital. Board Certified and Board Eligible obstetricians from the hospitals (and more recently, Certified Nurse-Midwives) are providing the maternity care in the centers. These physicians are paid on a per-hour basis by the M.I.C. Projects.

<u>Replication</u>

Information may be obtained from the Department of Health, the City of New York.

6. Office of Child Development, Head Start Health Program
Atlanta, Georgia
Medical Director: Sanford Matthews, M.D.

The private and parochial schools in Atlanta, Georgia, have an excellent Head Start Health program for 800 children who are distributed in ten centers throughout the city.

Private physicians throughout the city contract with Head Start for their services. Between 60 and 70 children are assigned to each pediatrician, who in turn meets with the school officials and Parent Advisory Committee at his center.

The physicians try to conduct physicals with parents present. Recommendations concerning treatment for each child are sent to Dr. Matthews who assigns these children to clinics where specialists are available in cardiology, orthopedics, dermatology, opthalmology, and hematology. These physicians are reimbursed by clinic session rather than on a per child basis. Many contribute their services which can be counted as the in-kind contribution by the state in matching for federal funds.

Dr. Matthews is enthusiastic about the response from private physicians in the area. When approached by an organized team which has outlined the responsibilities and set up the operating routine, physicians are willing to work the Head Start children into their schedules. Dr. Matthews encourages other city and county planners to involve local physicians in this manner.

Replication

Information about this program is available through the American Academy of Pediatrics, which contracts for the services of pediatricians for Head Start Health.

7. Office of Child Development, Head Start Health Program
Private and Parochial Schools, Chicago, Illinois
Medical Director: Robert Mendleson, M.D.

The 3000 four- and five-year-olds enrolled in the 70 Head Start Centers in Chicago receive all of the nine principal health services outlined by the national medical directors of Head Start:

1. Medical evaluation, including medical history, developmental assessment and physical examination

2. Screening tests
   a. vision
   b. hearing
   c. speech
   d. tuberculin testing

3. Laboratory tests
   a. urine testing for albumin and sugar
   b. blood testing for anemia

4. Dental assessment

5. Preventive services, including immunization

6. Psychological evaluation

7. Health education, including discussion with parents

8. Teacher observation

9. Treatment and appropriate follow-up services.

Dr. Robert Mendleson is the head of the program for the private and parochial schools. The health program for the public school children is separate.

Two teams of nurses and technicians travel to each Head Start Center to administer physical examinations. The nurse is the principal examiner and the technician does hearing and vision testing and blood and urine work-ups.

Necessary immunizations are given and a third nurse arranges for follow-up treatment at hospitals, clinics, and with private physicians.

The dental program is headed by Dr. Albert Johnson, who contracts with six other area dentists for their services part time. They are paid on a per diem basis.

Medical and nursing students from schools in the area assist the nurse-technician teams with examinations and follow-through arrangements.

Head Start and other public aid funds are used to finance the examinations and necessary follow-through treatment.

Replication

The staff training and supervision have been a key to the success of this project. Inquiries about the administrative arrangements may be obtained from Dr. Robert Mendleson at his Chicago address.

A complete list of Head Start pediatricians in your area may be obtained from Mr. Ed Epstein, American Academy of Pediatrics, 1801 Hinman Avenue, Evanston, Illinois 60204.

8. Office of Child Development, Head Start Health Program
Fresno County, California
Director: Mrs. Joanna Jameson

Fresno County includes 5,000 square miles and is the sixth largest county in California. In this county of approximately 407,000 people, the major industry is farming. The type of crops grown here require large numbers of field workers. These workers constitute most of the families involved in the Head Start Program.

There are 600 children at eighteen sites. Fifteen of the classes are open on a nine-month basis; the other three are continuous and one of these three is a day care center.

Because of the vast distances between sites, it is necessary for Fresno County to use six R.N.'s and six nurse aides to give optimum medical care to the children and families of this program.

One nurse and one aide, working as a team, cover six classes and approximately 100 children. It is the responsibility of each nursing team to complete a medical work-up, dental evaluation, observe in the classroom and visit the home of every child in each class.

Each nursing team completes:

1. Health History: This includes a family medical history.
2. Testing for Hearing Acuity: Each nurse who conducts testing must have a certificate in audiology.
3. Vision Screening: The Elks Club does much of our vision screening. Follow-up is done by using the Snelling test.
4. Hemoglobin: This may be done by the aide as well as the R.N., if the R.N. is in attendance.

5. Urinalysis: This includes albumin, sugar, specific gravity, and ph. This test is also done by the aide or R.N.
6. Dental Evaluations: These are done by the local dentists who belong to the California Dental Society. The Fresno Head Start holds a contract for dental services with these individuals.
7. Medical Examinations: These are done by the physician of choice of the individual parents.
8. Follow-Up Medical Care: This includes all necessary referrals to obtain and maintain a healthy child. They use as many of the resource agencies as possible, including the Crippled Children's Services, Elks Club, Lions Club (for glasses), Fresno County Welfare Department, Fresno County Public Health Department, and specific organizations as needed such as Muscular Dystrophy, etc.

In addition to the above duties, the nursing team makes daily observations in the classrooms. The team meets with other staff members such as teachers, teacher aides, cooks, cook aides, site directors, social workers, and social worker aides to work on specific problems of individual children or families.

The nursing team acts often as a liaison between the family and the school or doctor. In this program, the nursing teams work closely with the social worker teams as well as the teaching teams.

The nursing teams attend Parent Advisory Council meetings at their assigned sites. Each team will be responsible for presenting programs of interest to the parents at special meetings. The subjects covered in these meetings are set up to help the parents to increase their knowledge in home nursing, artificial respiration, first aid, planned parenthood, cancer detection, immunizations and communicable diseases, environmental

health, nutrition and the importance of a good family dental program.

In many sites, the transporting of children and parents to and from medical and dental appointments is the responsibility of the nursing and social service teams. They encourage parents to accompany the children for all appointments, but this is not always possible.

Training the team to work together really starts as each individual is hired. In-service programs are set up to obtain information as well as for a certain amount of continuity for each team. When necessary, resource people from Fresno State College, Fresno County Mental Health Clinic and many others contribute to specific topics for discussion and needed information. Both the nurses and aides are encouraged to take classes at the State College or Junior College to increase their nursing skills as well as to upgrade their positions.

Because of the lack of transportation and the lack of doctors in rural areas, the Fresno people are planning the use of the nurse in the extended role. They are investigating a program in practice at Kaiser Health Center in Oakland and will set up a series of classes in cooperation with Fresno State College Nursing Department, the Fresno County Medical Society, and a number of interested pediatricians under the supervision of Drs. James Caffee and William Zuering. Dr. Caffee has taught such a course in the past and is a dynamic innovator in the Fresno area Head Start Health program.

The concept of this role is to increase the academic, clinical, and experimental knowledge of the Registered Nurse to more efficiently utilize her abilities in observation, counselling, and coordination of resources to meet the child's needs. She will become more proficient in observing details in behavior and overall observation for clinical evaluation. She will learn to complete an extensive physical examination. She will be instructed on the fine techniques of taking a medical history. Any child with a history of neonatal trauma, traumatic birth, apparent emotional disorders, chronic infections, allergies or other factors predisposing to possible medical problems will automatically be referred to a physician.[1]

Replication

Details about this excellent health program for preschoolers may be obtained from Mrs. Jameson at the Fresno County Community Action Agency, Fresno, California.

---

[1]Refer to Section D., Manpower Considerations, for further details on programs which train and employ nurses in an expanded role in the delivery of health services.

9. Student American Medical Association
Task Force on Appalachian Child Development
Spruce Pine, North Carolina
Director: Jerry Cade

Included in the 1970 Student American Medical Association Summer Appalachia Program was a multi-disciplinary team of students oriented to provide health services for young children. Their target group was 250 Head Start children in Yancey and Mitchell counties in North Carolina. The team consisted of four medical students, one nursing student, one pharmacy student, one elementary school teacher who had a background in psychology, and a recent college graduate.

Working closely with Dr. Fergus Pope, the Head Start pediatrician for western North Carolina, the team completed a comprehensive examination of each child which included a complete family medical history, physical exam, hearing, sight, and speech evaluations, blood and urine analyses, and several psychological tests. The students provided these much needed services in a well-organized and professional manner and in the process developed excellent rapport with the school personnel, physicians, parents, and children. This then enabled them to arrange follow-thrcugh and initiate continuing services through the established institutions. All three phases of the project, examination, follow-through on the findings, and community involvement, were packed into a nine-week period.

Each member of the team had a specific role but was trained to handle a variety of responsibilities so that he could assist his team workers. The nursing student worked closely with the public health nurse to schedule appointments and make general administrative arrangements. Medical students did physicals and blood and urine testing. The elementary school teacher and pharmacy student carried out the major portion of the vision and hearing testing, although the entire team received training with the equipment and could pitch in to help when it was necessary. They used an Otometer audiometer for hearing evaluation, and the E-Chart and a device for measuring muscle imbalance for vision testing. The elementary school teacher coordinated the psychological evaluation and school readiness tests. Added to each child's file were the results of the Otis-Lennon, Bender-Gestaldt, short-term memory exams, tests for mixed hemisphere dominance and language skills exam. To prepare the students to administer these tests, a two-week training session was conducted by Bob Goodwin, a state psychologist. The Spruce Pine high school guidance counselor and psychologist became interested and joined the team full time, providing continuing professional supervision for the students and receiving additional training himself. A speech pathology student worked with the team to help them analyze and later correct speech difficulties.

The team spent the first part of the nine-week summer period traveling to each of the ten Head Start elementary

schools where they examined the children and made recommendations based on the findings. During the second half of the program, the students, together with the professional and community people they contacted, arranged for follow-through of the written recommendations on each child.

The recommendations were the product of group meetings with the students, the school psychologist, the Head Start pediatrician, and the Head Start teachers, many of whom will have the same children as first graders in the fall. The results of the comprehensive evaluations were discussed with the teacher and related to her classroom experience with the child. Dr. Pope offered practical, helpful hints for handling several children whose tests and Head Start experiences indicated that they might have problems with school adjustment. Other recommendations concerned dental treatment, vitamin supplements, and surgery. Most importantly, Dr. Pope's meeting with these teachers is only the beginning of continuing concern for and re-evaluation of each child.

Additional follow-through will include distribution to first grade teachers of a manual describing exercises for children with visual perception problems. It was prepared by the Head Start psychologist and two members of the student team. Elementary and Head Start teachers will be reached for final evaluations over a year-long period; children with eye and orthopedic problems were taken to the pediatric supervisory clinic in Burnsville; dental appointments were made with the

dentist the students helped recruit for full-time service to children. (Preventive dentistry in young children is time-saving and cost productive. Many dentists are not willing to treat children, however, and there are few pedodontists or children's dentists available in the country or in Appalachia.) The team outlined comprehensive services for the pediatric clinic and established an externship program to be funded by SAMA. In this way Dr. Pope will have year-round help in carrying out comprehensive health care for children. The students have worked with the Board of Education and there will be at least one special education class, for which they recruited a full-time teacher, beginning in the fall. They also worked with the local department of mental health and anticipate that additional special classes for the mentally retarded will be initiated throughout the system. Psychological services will be provided for the young school children by the State Department of Mental Health.

One medical student successfully solicited funds from local citizens and the medical society and will establish a year-round mobile unit for hearing and vision screening.

Basic to the success and smooth operation of the program were the supervision of Dr. Pope and his belief that students were capable of delivering health services. The presummer planning by Dr. Pope and Jerry Cade made possible a productive project which could "get off the ground" immediately. The students knew when and where the children were available and

what needed to be done. This enabled them to send letters to the parents of each Head Start child explaining that the physicals would be conducted and that they were invited to attend. It was necessary for one parent to be present to obtain the family medical history. Home visits were made by the students to the parents who were unable to attend due to work or other prior committments.

In addition to meetings with parents and teachers concerning individual children, the students met with Dr. Pope two or three times each week. Program and administrative questions which arose were discussed. Films were shown and individual talks presented. One medical student presented information on allergies; problems of fluoridation were discussed another time. Special reports or responsibilities were assigned. For example, the pharmacy student compiled a list of drugs which should be available in the home and another list of those drugs which are legal for a school to keep on hand. A premedical student from Vanderbilt joined the group for a short time and compiled a description of child health resources in the county.

The cooperative spirit of the group at Spruce Pine was refreshing and productive. Other communities who wish to draw on valuable student resources may want to contact Dr. Pope for information about the training, supervision, and careful planning which can make such endeavors worthwhile, both for the young children, who benefit from excellent health

care they would not otherwise receive, and for health professionals who wish to improve systems of delivering health care in their communities.

Replication

Outreach programs from colleges have become more widespread over the past five years. Programs can be established where students have the opportunity to play a meaningful role in delivering services and in initiating change. Careful training and sensitive supervision are crucial. Those communities who wish to involve students may need further information from Dr. Pope or from the Student American Medical Association.

C. DIRECTED PROJECTS

Family Planning Services

Family planning services are necessary for all women. They are particularly crucial, however, for those women who can be defined as "high risk mothers."

The Ohio Department of Health has defined these high risk mothers as individuals who have one or more of the following conditions. They are classified in this way because of the medical obstetrical, and/or social complications which could occur:

a. Grand multipara: woman who has delivered four or more babies.
b. Diabetic: especially a severe diabetic of long duration.
c. Heart disease: any cardiac complication, especially rheumatic heart disease, or one who has a history of rheumatic heart disease.
d. Nephritis: anyone who has a kidney dysfunction with known pathology.
e. Syphillis: especially during 1st trimester which was untreated.
f. History of premature deliveries.
g. Habitual aborter: one who has lost 3 or more consecutive pregnancies.
h. Age: anyone under 16 years of age or over 40 years of age.
i. Multiple gestation: twin pregnancy.
j. Poor obstetric history: any history of difficulty with past pregnancies, labors or puerperal period.
k. Delivery of one or more babies with congenital anomalies or severe birth injuries.

The following three articles describe the planning and operating of family planning programs in St. Louis, Missouri; New Orleans, Louisiana; and the State of Ohio.

1. Family Planning Programs

a. Maternal and Child Health Family Planning Service For the St. Louis City and County Area Submitted to the Office of Economic Opportunity

History

Prior to 1961 only the seven southeastern states provided clinical services in family planning. Four more states were doing so by mid-1963. One year later at least nine more had begun, and 6 or 7 have been added since. It is apparent that in the United States family planning is now accepted as an essential component of community medical care.

Philosophy

The healthful results of family planning in the broadest sense are now recognized by leaders of medicine, public affairs, and major religious groups. The broadest definition of family planning includes not only control of fertility, but the correction of infertility and the promotion of responsible parenthood.

The welfare and well-being of its families are the primary concern of any community. Circumstances of low income, insufficient education and depressed socio-economic status should not deprive a family of the opportunity for information and services on family planning. Those who depend on public medical care in the St. Louis City-County area do not have access to guidance and service in this field, although such has been available for many years to those who obtain care on a private-patient basis.

The American Public Health Association, the American College of Obstetrics and Gynecology, the American Medical Association, and a number of State Boards of Health and Medical Associations have recognized family planning as an integral part of good maternal-child health, preventive health service and responsible medical practice.

Program Philosophy

1. The moral, religious beliefs of doctors, nurses and other Health Department employees, and most particularly all patients involved, shall be completely respected.

2. Requests for this service must be initiated by the eligible recipient on a purely voluntary basis.

3. All methods of child spacing shall be included in the counselling program; methods acceptable to all religious groups shall be made available.

4. The program shall include dissemination of literature as well as necessary medications and devices.

Eligibility

1. Those mothers who attended prenatal clinics conducted by the City and County of St. Louis Health and Hospital Departments.

2. Women who delivered on the wards of one of the three municipal hospitals in St. Louis City and County.

3. Mothers receiving Welfare Department assistance, upon direct referral by authorized officials.

4. Indigent mothers or other married women referred by private physicians, public health services of hospital clinics.

Methodology

1. An educator (nurse, social worker, or any specially trained individual) will hold a teaching session twice weekly on the obstetric wards of the three municipal St. Louis area hospitals on the desirability of child spacing and its role in responsible parenthood. Participation by patients shall be on a voluntary basis only. All methods of family planning shall be discussed.

2. The pharmacies of the three municipal hospitals and the Health Centers of St. Louis City and County shall be equipped with appropriate materials and medications for family planning. These shall be made available to patients who request them; payment, if any, shall be on the same basis as that individual has in the past been accustomed to pay for drugs received from the public health or hospital facility.

3. The Health Centers shall conduct teaching sessions on the indications for family planning methods. These shall be in both group and individual sessions. Informative literature shall be available for those who request same.

4. The program shall provide services in a manner compatible with the moral and religious beliefs of patients and personnel of the Health and Hospital Departments.

5. Funds for this program shall be disbursed to the St. Louis Human Development Corporation for allocation to the

Divisions of Health and Hospitals of St. Louis City and to the County Hospital and Health Department of St. Louis County.

Personnel

1. Program Consultant: This person shall be a M.D. who will work with the St. Louis City and County public health officials in establishing and operating this program. He will supervise the efficient performance of the program, insure adequate record-keeping, review necessary reports and budgeting, select informative materials, interpret the program to the public and initiate and answer correspondence.

The Program Director will be immediately responsible to the Director of Health and Hospitals of St. Louis City, the Health Commissioner of St. Louis County and the Hospital Commissioner of St. Louis County.

2. Educators: These personnel shall be nurses, social workers or other trained individuals who will conduct teaching sessions in the health centers and provide in-service training to the Health and Hospital personnel who are involved in the program. They will be immediately responsible to the department in which they are assigned.

3. Secretary: This person will provide all the necessary clerical activities for the operation of the program. She will be responsible directly to the program consultant.

Contributed Personnel

The differing administrative structures and the operating procedures of the St. Louis City Department of Health and

and Hospitals, the St. Louis County Health Department and the St. Louis County Hospital require the participation and complete cooperation of the city and county hospital and general health officials. Each will coordinate the family planning services with the hospital or health center services of which he is the administrator. In addition, the head nurse in each of the ten public health facilities (seven health centers and three municipal hospitals) will assign patients to appropriate family planning sessions and aid the health educators with follow-up.

Budget

Program Personnel	Funds Requested From O.E.O.	Grantee Contribution
1 Program Consultant (1/2 time)	$ 9,000	
3 Educators @ $7,000	21,000	
1 Secretary @ $4,600	4,600	
Fringe benefits (10% of salaries)	3,460	
TOTAL	$ 38,060	

	Funds Requested From O.E.O.	Grantee Contribution
Consumable Medical Supplies		
Medications (@ $12/yr. per patient)		
St. Louis City[1] 8,000 patients	$ 96,000	
St. Louis County[2] 1,600 patients	19,200	
TOTAL	$115,200	
Informative Materials	$ 5,000	
Travel Costs		
City-County travel costs - 8,400 miles @ 8¢ per mile	$ 672	
Out-of-town Travel	$ 1,000	
Office Equipment		
5 Desks @ $150	$ 750	
5 Chairs @ $50	250	
2 File cabinets	300	
1 Electric typewriter	360	
3 Movie projectors	750	
3 Movie screens	300	
TOTAL	$ 2,710	

[1]Based on a total of about 6,000 deliveries in municipal hospitals in 1964, of whom it is estimated 2/3 may attend the Family Planning Clinic (4,000). In addition, an estimated 4,000 mothers may attend the first year of operation, this being roughly half of all mothers attending well-baby conferences with one child under the age of 5 years. 8,000 x $12 = $96,000.000.

[2]Based on 2/3 (600) of the 900 deliveries at St. Louis County Hospital in 1964, plus 1/2 of the 2,000 women attending Child Health Conferences with one child under age 5 years. 1,600 x $12 = $19,200.00.

	Funds Requested From O.E.O.	Grantee Contribution
Consumable Office Supplies		
Paper, postage, etc.	$ 200	
Consultant Services	$ 1,200	
Rental Costs for Office Space		
500 sq. ft. @ $2.50 per sq. ft.		$ 1,250
Contributed Personnel[1]		
Assistant Health Commissioner, St. Louis City @ $19,800 (5% time)		990
Hospital Commissioner, St. Louis City @ $24,090 (5% time)		1,205
St. Louis County Health Commissioner @ $19,800 (5% time)		990
St. Louis County Hospital Commissioner @ $23,562 (5% time)		1,178
10 Head Nurses (10% time) @ $7,700 per annum		7,700
10 Staff Nurses (5% time) @ $6,600 per annum		3,300
6 Social Workers (10% time @ $7,150 per annum		4,290
4 Social Workers (5% time) @ $7,590 per annum		1,520
TOTAL		$ 21,173

[1]Salaries include fringe benefits (10% of salary).

TOTAL PROGRAM COSTS	Funds Requested From O.E.O.	Grantee Contribution
$ 186,465	$ 164,042	$ 22, 423

Replication

This program was funded and has been operating. Details may be obtained from the Maternal and Child Health Division of the St. Louis Department of Health.

b. Family Planning Program
Tulane University School of Public Health and Tropical Medicine
Director: Joseph D. Beasley, M.D.

This program was designed and initiated by Joseph D. Beasley, M.D., Professor of Pediatrics and Maternal and Child Health and Director of the Center for Population and Family Studies, Department of Maternal and Child Health and Population, Tulane University School of Public Health and Tropical Medicine.

The basic goal of this program is to establish an effective community family planning program which will be of such health value to the community that it will significantly reduce vital rates such as infant mortality, prematurity, and illegitimacy. Further, this program is established to provide family planning information and services which will promote the dignity of the individual family, to improve community health, and to foster an environment which will enhance the ability of the family to develop the potential of each child.

Four main problems are identified:

1. To develop and implement a patient-oriented program capable of identifying, contacting, educating, and offering family planning information and service to the "high risk" or immediately post-partum women between 15 and 44.

2. To utilize existing family planning technological information, as well as limited personnel and funding resources, to achieve a reduction in the infant, maternal and stillbirth mortality rates.

3. To reduce the incidence of mental retardation by reducing the number of premature birth which occur after a "desired" family size has been achieved.

4. To select, train, and supervise auxiliary health personnel, recruited from the indigent population, for locating patients and for disseminating information about the family planning region.

In October of 1966, Dr. Beasely's plan was initiated with the formation of a nonprofit corporation designated as the agency responsible for coordinating and implementing the service aspects of the demonstration program. This corporate mechanism was chosen, after considerable study, because the limited available funding required the use of existing resources and personnel with maximum efficiency and a degree of administrative flexibility that did not currently exist among the organizations participating in the program. As Dr. Beasley explains in the enclosed pamphlet, this mechanism might not be most suitable for each state or county undertaking such a program.

Replication

Dr. Beasley's office in New Orleans has a great deal of program and administrative materials available for distribution. Those interested may write to him at Tulane University.

c. Guidelines for Developing Family Planning Services
Ohio Department of Health
Former Director of Maternal and Child Health: Effie Ellis, M.D.

The Ohio Department of Health has devised useful guidelines for developing family planning services.

Guidelines for Development of a Family Planning Service

I. Problems: Development of a Family Planning Service

A. Preliminary Step
Make request to:
1. State Director and staff of Division of Maternal and Child Health
2. Division (Bureau) of Local Services
3. District Health Officer
4. Local Health Department
5. Statistical person from State Health Department

II. Essential Information: Needs and Resources

A. Geographic area to be served
1. Demographic Data for Current Year (Young and Old Population)
a. Total population
b. Predominant ethnic groups, i.e.,
1) Irish
2) French
3) WASP (White Anglo-Saxon Protestant)
4) Italians
c. Vital Statistics
1) Crude death rate
2) Crude birth rate
3) Infant death rate
4) Maternal death rate
5) Total population
a) Total number of women of childbearing age
b) Total number of births to women under 15 years of age
c) Total number of births to women 15-19 years of age
d) Total number of births to women over 40 years of age
e) Number of illegitimate births under 20 years of age
f) Number of illegitimate births under 15 years of age

g) Number of families with income under $3,000
h) Number of families receiving federal assistance, i.e., ADC-ADU

2. Economic Data

a. Major source of income for lower income group
   1) Regular employment
   2) Irregular employment
   3) Factories, business, public work, etc.
b. Per cent of population under $3,000 income
c. ADC case load

3. Health and Social Problems

a. T.B. - V.D. rate
b. Number of working mothers
c. Day care center services
d. Juvenile delinquency problem
e. Employment of, lack of
f. Housing
g. Family planning services now available
   1) Hospital
   2) Health Department
   3) Planned Parenthood
   4) Other

III. Resources

A. County Medical Association

1. Contact for support and sanction

B. County Commissioners

1. Contact for assistance with financing

C. Local Hospital

1. Equipment
2. Personnel: nurses, physicians
3. Physical facilities

D. Local Public Welfare Agency

1. Concerned with ADC

E. United Community Council

F. Planned Parenthood

1. Methods, materials, medication, supplies

G. Council of Churches

1. Premarital and marital counselling

H. PTA and School Personnel

1. Dissemination of information
2. Develop school program Family Life Education

I. Home Extension Agent

1. Dissemination of information - education

J. Local Public Health Nurses: official and voluntary

1. Referral and follow-up
2. Education

K. Influential Citizens

1. Influence
2. Education
3. Prestige

L. Industry

1. Referrals
2. Cooperation
3. Dissemination of information - education

M. Voluntary Agencies

1. Family Service Agency
2. Salvation Army
3. Red Cross
4. Jaycees

N. Economic Opportunity Agency

1. Financial assistance, casefinding
2. Public relations

O. University Hospital Medical School

P. Legal Personnel

IV. Policies: Work with Local Health Department, State Health Department (MCH Division), Local Advisory Committee, and Planned Parenthood re:

A. Admission

B. Eligibility

C. Contracts for Payment of Services

1. Medical
2. Nursing
3. Hospital
   a. Equipment
   b. Facility
   c. Laboratory
   d. Supplies

D. Continuity of Care

1. Patient follow-through
2. In-service education
   a. Hospital staff
   b. Public health nurse
   c. Physician
   d. Clinic team

E. Medically-Approved Contraceptive Methods

1. Devices
2. Medication
3. Rhythm

F. Financing

1. Use hospital examining tables, facility, supplies, devices, medication, payment from state MCH funds

G. Records

1. Hospital
2. Children's Bureau
3. State MCH
4. Local health department
5. Record committee

H. Evaluation

1. Family planning - number of births vs contraceptive methods
2. Family Life Education in schools now and then
3. Attitudes
4. Behavior

The staff outlined in the preliminary step will work cooperatively to assemble such data as will be needed to determine the need, community cooperation, available resources on a local, state, and federal level; plus the estimated amount of money needed to provide the necessary money, staff, supplies, equipment, and housing for a family planning service.

Guide for Use in Completing Maternal and Newborn Interagency Referral Form

Maternal Conditions

1. High Risk Mother: Individuals who have one or more of the following conditions would be classified as high risk because of the medical, obstetrical and/or social complications which could occur.

   A. Grand multipara: woman who has delivered four or more babies
   B. Diabetic: especially, a severe diabetic of long duration
   C. Heart disease: any cardiac complication, especially rheumatic heart disease, or one who has a history of rheumatic heart disease
   D. Nephritis: anyone who has a kidney dysfunction with known pathology
   E. Syphillis: especially during 1st trimester which was untreated
   F. History of premature deliveries
   G. Habitual aborter: one who has lost 3 or more consecutive pregnancies
   H. Age: anyone under 16 years of age or over 40 years of age
   I. Multiple gestation: twin pregnancy
   J. Poor obstetric history: any history of difficulty with past pregnancies, labors or puerperal period
   K. Delivery of one or more babies with congenital anomalies or severe birth injuries

2. Complications of Pregnancy

   A. Toxemia: a condition peculiar to or dependent upon pregnancy which causes one or more of the following clinical manifestations: excessive weight gain (over 2 lbs. per week or over 20 lbs. total); edema; hypertension; albuminuria; convulsion or coma
   B. Hyperemesis: excessive vomiting, especially after 1st trimester
   C. Chronic hypertension: any individual who has a sustained B/P over 140/90 or has an increased diastolic pressure of 10 mm or more, repeatedly over normal B/P
   D. Edema: pitting edema of face, hands, lower extremities which does not recede after a night's rest

E. Hemorrhage: any bright vaginal spotting or bleeding that could be a warning sign of Placenta Praevia, Abruptio Placenta, Hydatiform Mole or possible Ectopic Pregnancy
F. Infection: any acute or chronic upper respiratory, gastro-intestinal, genitourinary (especially Pyelitis) infection. Endocarditis, Thrombophlebitis or Pelvic Inflammatory Disease

3. "Walk-in" for Delivery: any woman who enters the hospital for delivery without having had any prenatal care. Why?

A. None available in area
B. Lack of money
C. Lack of knowledge
D. Lack of interest

4. Complications of Labor or Delivery

A. Premature rupture of membranes: over 24 hours prior to delivery
B. Hemorrhage: due to Abruptio Placenta, Placenta Praevia, Marginal Sinus Rupture, Ruptured Uterus or Retained Placenta
C. C/S delivery: because of prolonged labor, cephlo-pelvic disproportion, elderly Primigravida with breech presentation, uterine inertia, contracted pelvis, tumors or birth canal, repeat C/S, etc.
D. Dystocia: prolonged, difficult and/or painful labor
E. Amniotic fluid embolism
F. Complications resultant from anesthesia: i.e., cardiac arrest or pulmonary edema

5. Complications of Puerperium

A. Post partum hemorrhage caused by Uterine Atony, Retained Placenta, Lacerations or Subinvolution of the Uterus
B. Infections
    1. Endometritis: inflammation of lining of uterus
    2. Parametritis: inflammation of loose connective tissue surrounding uterus
    3. Thrombophlebitis: enlargement and/or inflammation of deep pelvic veins
    4. Infection of perineum around area of sutures following an episiotomy and repair
    5. Mastitis: infection of mammary glands and surrounding tissue

C. Severe, painful breast engorgement
D. Untoward psychological reaction toward childbirth experience which might lead to post partum psychosis
E. Concern about problems with newborn

Replication

Details on operating the program may be obtained from the Ohio Department of Health.

2. State Service for Crippled Children
University of Iowa
Vision Screening of Preschool Children

Eye defects consistently lead the list of the childhood handicapping conditions in the United States. More than 11 million in the 5 to 17 age group are visually handicapped to some degree.

Many eye conditions are preventable. For preventive measures to be most effective, screening should be carried out during infancy and early childhood. Three major problems which can be identified during this period are refractive errors,[1] strabismus,[2] and amblyopia.[3] Early treatment of these problems is crucial. If they are not identified and treated early, the defects can limit the children for the rest of their lives.

The State Service for Crippled Children at the University of Iowa recognized the importance of early screening for eye problems, and arranged to carry out the vision screening of preschoolers in 60 mobile clinics. They also provided general up-to-date screening information to private physicians.

Several eye tests which can be administered by a nonmedical person were used. An ophthalmologist, a physician who has had special training in problems related to the eye, prepared local

---

[1]Refractive errors: inability of the eye to accommodate to change in light and image.

[2]Strabismus: deviation of the eye which the patient cannot overcome.

[3]Amblyopia: dimness of vision without detectable organic lesions.

people specifically for administering these tests. In both the Michigan Preschool Acuity Test and the Titmus Optical Vision Tester, cards with pictures of animals or letters are presented. Depending on his age, the child may be asked to identify the animals or letters. The advantage of the Titmus machine for a mobile unit is that there is no need for the 20-foot distance between the person and the card. The child looks directly into the machine. However, the machine is costly. Also, it is difficult to observe facial reactions of the child, which can be revealing with the preschooler.

Criteria for a complete professional eye examination were (a) failure to read the 20/30 slide in the Michigan test, (b) an ability difference of two lines between eyes, (c) signs of muscle imbalance, or (d) specific symptoms of eye trouble.

The professional eye examiner strove for follow-up by sending both explanatory letters and a standard report to the parents and to the referring physician.

Results of the 1967 and 1968 Clinics

During 1967 the vision of 585 preschool children was tested. Forty-nine children, or 8.4 per cent, failed the test and were referred for complete professional eye examination, but only 22 per cent of the 49 received the examination. It was clear that the follow-through needed to be more vigorous.

In the first year (1967) of the vision screening program, the complete eye examination was recommended only in the clinic report letter to the family physician, although both parents

and physician received a report with explanations. Follow-through was pursued more vigorously in 1968. The examiner encouraged both the parent and the family physician to arrange for a complete eye examination for the child who had been referred. The time between the screening and the sending of the reports and letters was cut considerably in 1968. In addition, the examiner requested a reply from the parents on the same form on which he explained the diagnosis and recommended trestment. He especially encouraged the parents to bring the children for the referral examination and explained its importance.

As a result of these changes in follow-through procedures, almost two-thirds of the children referred during 1968 reportedly completed an eye examination. Of the 648 preschool children successfully tested, 43, or 6.6 per cent, were referred for additional eye examination and 27, or 63 per cent of those referred, carried through with this advice. The fact that it was the second year of the project, plus the additional encouragement and information made a significant difference in the delivery of care to the children. A number of those whose conditions were diagnosed were treated with proper glasses or eye patching.

Still another test, which is similar to the two described, is the illiterate "E" game or Snellen E Test. Some three- and certainly most four-year-old children of normal intelligence can cooperate for fairly reliable results.

There are four factors which should be kept in mind when testing young children. They often have a short span of attention; they are easily distractable; they may become somewhat cranky or irritable; and finally, it may be useful for both the reliability of the test and for the cooperation of the child for him to practice the "E" game at home with his mother. Those who have administered this test to young children have two further suggestions: the child may do better if he is presented with a series of single E symbols rather than an entire line. Also, it is essential that each eye be tested separately for best screening for amblyopia. Because this is the main source of loss of vision, those administering these tests are most anxious to detect any signs of early amblyopia.

Infants

Although it is difficult to diagnose eye difficulties with infants, the practicing physician can incorporate several preventive measures into his routine health supervision of children. The alignment of the infant's eyes should be noted at every well-baby examination. Infants with eyes that are obviously out of alignment should be referred at that time to an ophthalmologist for special diagnosis and perhaps, treatment. Penlight examination of the eyes of infants and young children allows the physician to assess the alignment while fixating an object (the light). Properly aligned eyes should have a central corneal reflection of light; reflection that is only a

few millimeters off center may indicate a significant strabismus. Penlight examination with a careful alternate cover maneuver, can also help the examiner identify eyes that may have a latent tendency to deviate. Although these procedures are not a substitute for professional eye examination, they serve an important function in identifying infants and children who are in need of a more complete ophthalmological evaluation.

Additional information about the organization of this program can be obtained from Dr. Sidney S. Kripke, State Services for Crippled Children, University of Iowa, Iowa City, Iowa 52240.

3. Vanderbilt University Medical and Law Students Program in Appalachia Comprehensive Health Screening Director: William Dow

Vanderbilt University conducted an expanded summer demonstration program for medical and law students in rural eastern Tennessee during the summer of 1970. The program was designed to:

1. involve students directly in health care delivery;
2. commit students' institutions to participating in the program;
3. help organize ad hoc committees of local people for the immediate purpose of preparing the health fairs and to form these into permanent health councils which could work to alleviate health conditions in the area.

The 1970 Vanderbilt program, which was funded by the Appalachian Regional Commission, the Tennessee Valley Authority (TVA), the Regional Medical Program, the Macy Foundation, the Field Foundation, and the New World Foundation, recruited 50 students to work in eight isolated rural communities.

Two law or undergraduate students (not medical students) lived in each community early in the summer. They helped to organize ad hoc committees of local people to do preliminary publicity and organization for a health fair which the medical students proposed to bring to the community and to form these into permanent local health councils which would work to alleviate health conditions in the areas. Although the students continued to recruit and conduct publicity for the health fairs, the involvement of local citizens in the whole health problem

was stressed. The local health council in each community decided where the health fair should be held, and local citizens recruited by the health council did the clerical and simple testing work at the health fair. In more than one case a responsible twelve-year-old took blood pressure or ran a hearing test.

The health fair had a collection of laboratory equipment, including two mobile vans which permitted exhaustive diagnostic tests. The vans were supplied by TVA and two technicians from TVA helped a group of medical students use the equipment. The students received an intensive two-week-long orientation and training course in the use of the diagnostic equipment at the beginning of the summer. The students had with them at all times a doctor as well as rotating physicians from Vanderbilt University and the local communities.

The health fair was arranged so that people could move easily from one test to another. Adults went through one route and children through another. The units handled from 500 to 1,200 people per week. The two community-based students attempted to arrange transportation and assistance for local indigents so that those most in need of medical treatment could get to the health fair.

The screening was a complex procedure and included an electrocardiogram, a chest X-ray, 22 blood tests, tonometry (test for glaucoma), a urinalysis, a pulmonary function test, visual and auditory analyses, a Pap smear, TB and skin tests and

a complete physical examination. The comprehensive procedure was designed to detect the greater majority of diseases.

Much of the analysis and diagnosis was carried out at the health fair, with additional tests at TVA laboratories when necessary. The doctors working with the health fairs prescribed and distributed drugs. The results were recorded and turned over to local physicians or responsible medical authorities.

After the medical component moved on, the community-based students tried to insure that the health defects diagnosed by the health fair were treated. They canvassed local resources to discover where patients could successfully be referred and tried to determine which local agencies would accept indigent patients. The local health councils shared the responsibility of making appointments and seeing that treatment was continued.

Every assistance is being given to local health councils to continue local health programs and to establish community clinics, staffed full time by a nurse. Two or three medical students from Vanderbilt and a faculty member are committed to visit such clinics once a week throughout the school year.

The legal aid project, another phase of the program, was an offshoot of the realization during the 1969 summer program that many medical problems in isolated communities could be solved with legal assistance. The half-dozen law students involved in the program canvassed the region and offered assistance to local citizens who were not aware of the steps they needed to take to obtain it. They also helped the local

health councils set up organizations. The broad goal of this part of the program is to provide local citizens with an interdisciplinary tool to fight the health problems of the poor.

In addition to the general screening and follow-up efforts, which reached more than 3,000 people during the summer of 1970, several smaller projects were undertaken. The water sources around Clearfield and White Oak have been contaminated for quite some time. Five years ago there were fifty cases of hepatitis at the school in White Oak. At the community's request the students tested water from various sources. They arranged for a graduate student from the Department of Sanitary Engineering to take on the development of a water system as a doctoral project.

Denver Developmental Screening Tests[1] have been performed on four selected communities. With this the students hoped to identify particular problem children and give them assistance. Further, they hoped to dramatize the need for specialized educational facilities.[2]

One result of the program has been, as hoped, greater involvement of the university in the problems of the rural poor. In addition to the medical professors who have agreed to visit

---

[1]A test for preschoolers to determine school readiness and possible mental retardation.

[2]See 1970 SAMA Task Force Program Description.

the health clinics regularly as they open, the department of pediatrics is showing interest in setting up a field professorship. The nursing students involved in the program are helping the nursing department formulate a nurse-practitioner curriculum (see Manpower section) which will produce nurses capable of delivering certain health services in isolated mountain areas where doctors may not be available. The law department has hired a professor to teach courses in the legal problems of the poor. The students have had a major responsibility for awakening this new feeling of involvement in the problems of rural communities.

Replication

Articles have appeared about this program in The Nashville Banner and The Nashville Tennessean which reflect the excellent rapport established between students and community members. Information about program operations may be obtained from Mr. Dow at the Vanderbilt University School of Medicine.

D. MANPOWER:

CONSIDERATIONS AND MODELS

Manpower: Considerations and Models

One of the prime limiting factors in expanding health services has been the shortage of trained manpower. The poor use of people who are available has compounded this problem.

What services are usually included in "comprehensive" programs for mothers and their young children? What kind of staff do we need to deliver these services?

Models offered by ongoing projects which are not described in detail should provide additional insight in answering both questions. In the first part of the Manpower section, services and staff of several programs are presented: Dade County, Florida, Children and Youth; Birmingham, Alabama, Maternal and Infant Care; and Proposed Staffing Pattern for one or two counties of about 25,000 people in Appalachia.

In the second part the expanded role of nurse-practitioner is described. Both the obstetrical nurse-clinician and the pediatric nurse-practitioner are going to be crucial in delivering health services in Appalachia.

The final part of the Manpower section includes brief descriptions of some new careers programs offered at Greenville Tech.

1. The Services and Staff of Several Programs

a. Children and Youth Project
Dade County, Florida

All Children and Youth Projects of the Department of Health, Education, and Welfare hold to a basic philosophy of providing comprehensive care. For example, the Dade County, Florida, Children and Youth Project provides service in the following areas:

1. Medical
2. Dental
3. Psychological
4. Social services
5. Speech, hearing, and vision
6. Health education
7. Nursing
8. Nutritional

To accomplish this the following professionals are employed:

2 pediatricians

1 dentist

3 public health nurses

1 nutritionist

1 clinical social worker

1 health educator

1 orthopedist

1 audiology technician (Community health worker)

1 audiometrist

3-5 health project interviewers

1 vision technician (Community health worker)

3-5 community health workers

The Community Health Workers are trained to administer the following tests:

Vision testing

Denver Developmental

Basic lab tests

Assist with medical records

Assist physicians

Assist audiometrist

Assist dentist

The Dade project has been highly successful in identifying members of the community who need care and in involving the community in the delivery of care to its own members. Further information can be obtained from the Department of Health, Dade County, Florida.

b. Maternal and Infant Care Project
Birmingham, Alabama

The Maternal and Infant Care Projects of the Department of Health, Education, and Welfare deliver comprehensive services. Their target population is somewhat different from that of the Children and Youth Projects, however, and their goals and staffing needs reflect this difference.

The Birmingham, Alabama, Maternal and Infant Care Project has defined five objectives:

1. Find high risk expectant mothers and provide intensive early care
2. Reduce morbidity and mortality
3. Intensive care for infants of "high risk" mothers
4. Reduce incidence of premature births
5. Reduce the number of deliveries by untrained midwives.

In order to accomplish these goals, the following personnel are needed:

1 medical director - obstetrics

1 medical director - pediatrics

1 pediatrician

2 obstetricians

1 internist

1 clinician (pediatrics)

1 clinician (obstetrics)

1 obstetrical anesthesiologist

1 laboratory technician

1 assistant nurse coordinator

1 liaison nurses (R.N. oriented in public health)

4 social workers

1 administrative officer

3 secretaries

3 clerks

The public health nurse is administratively responsible to the project director with technical supervision in each case.

With this support they can include such current techniques as the special test recently developed for the vision testing of infants under one year, which tests the opticokinetic reflex.

c. Proposed Staffing Pattern
Appalachia

Joanne Sexton, Director of Maternal and Child Health, Kentucky Department of Health, has defined a realistic model for groups of Appalachian communities. The staff reflects a new expanded role for nurses.

Staffing Pattern

(For a selected portion of the Appalachian region to consist of one to two counties, or about 25,000 people).

1. Maternal services

1 medical director who is board eligible in obstetrics and gynecology	$25,000/year
2 nurse midwives	$10,000-12,000/year each
1 registered nurse	$ 8,000/year
3 licensed practical nurses	$ 6,000/year each
2 principal clerk-stenographers	$ 6,000/year each
2 senior clerk typists	$ 4,500/year each
2 senior account clerks	$ 4,800/year each
2 account clerks	$ 4,500/year each
1 nutritionist	$10,000/year
1 social worker	$10,000/year
1 laboratory technician, registered	$ 7,000-8,000/year
1 administrator	$12,000/year

2. Child services

1 medical director who is a board eligible pediatrician and who has some knowledge and experience in growth and development and in newborn care	
4 pediatric nurse assistants	$10,000-12,000/year each
To share with Maternal Services stenographic and social work staff	
1 nutritionist	

2. The Expanded Role of the Nurse-Practitioner

Believing that the expanded role of the nurse-practitioner is the only way to close the gap between the supply of physician services and the public demand for them, the American Medical Association adopted the following motion on January 10, 1970:

> The Board voted to endorse in principle a sharp increase in the utilization of nurses and other qualified health professionals in medical care, under the direction of physicians, and direct all appropriate AMA councils and committees to intensify their efforts to achieve this expansion of medical care.

The nurse-practitioner does not replace the physician in all instances. Rather, she is an <u>expert in the normal</u>. With competent training, reasonable supervision, and adequate experience, she will be able to recognize deviations from normal and refer such patients for a physician's consultation and/or treatment.

The two major programs in which the nurse with an expanded role operates are directly related to maternal and child health services: (1) obstetrical nurse-clinician (trained in nurse midwifery) and (2) pediatric nurse-practitioner.

The obstetrical nurse-clinician is sometimes referred to as maternity nurse-practitioner or nurse-midwife. She is a registered nurse who obtains a certificate in the practice of nurse-midwifery when possible, or a nurse who has had advanced training and supervision in the examination and

assessment of the prenatal and postnatal patient and undergoes from six to nine months of additional training.

The pediatric nurse-practitioner provides total health care to children in the offices of private pediatricians and in areas with inadequate health services. She has had special training to provide comprehensive well-child care to well children and to identify, appraise, and temporarily manage certain acute and chronic conditions of the sick child. Her added training and responsibilities result in improved patient care and the more efficient and effective use of the skills and time of both the physician and nurse.[1]

In the following articles the training and role of the obstetrical nurse-clinician is discussed in relation to three programs: the Frontier Nursing Service in Wendover, Kentucky; the Nurse-Midwifery Service Program of the Maternal and Infant Care Projects and Participating Hospitals in the City of New York; and the proposed training and Utilization of Maternity Nurse-Practitioners in the District of Columbia.

The Pediatric Nurse-Practitioner Program of the University of Colorado Medical Center in Denver, Colorado, is described in detail in the reprint of the article by Drs. Henry K. Silver, Loretta Ford, and Lewis R. Day (see appendix). The program at Massachusetts General Hospital in Boston is also described.

---

[1]Henry K. Silver, M.D.; Loretta Ford, Ed.D.; and Lewis R. Day, M.D. "The Pediatric Nurse-Practitioner Program." Journal of American Medical Association, vol. 204, no. 4. April 22, 1968. p. 298.

The Training and Recruitment of the Nurse-Midwife[1]

Great Britain and Sweden, both of which have infant mortality rates considerably below that of the United States, use nurse-midwives for normal deliveries of babies.

In this country nurse-midwives are reportedly being used successfully at Downstate Medical College Hospital, State University of New York; Columbia-Presbyterian Medical Center Hospital in New York City; Kings County Hospital, Brooklyn, New York; John Hopkins University in Baltimore; the Frontier Nursing Service in Kentucky; and the Community Maternity Institute in Santa Fe, New Mexico; as well as in several areas in the middle west and in California.

The schools of nurse-midwifery are located in many areas of the country:

1. Maternity Center Association, School of Nurse-Midwifery, affiliated with Downstate Medical Center, State University of New York
2. Frontier Nursing Service, School of Nurse-Midwifery
3. The Johns Hopkins University, Nurse-Midwifery Program
4. Yale University School of Nursing, Nurse-Midwifery Program
5. University of Utah Medical Center, Nurse-Midwifery Program

---

[1]William H. Sheffey, Chairman; Mayor's Task Force on Health Goals; Washington, D. C., 1969, p. 6.

6. Presbyterian Hospital, Columbia University Graduate Program in Maternity Nursing and Nurse-Midwifery

7. New York Medical College, Graduate School of Nursing, Nurse-Midwifery Program

8. The Catholic University of America, Nurse-Midwifery Program, affiliated with Catholic Maternity Institute

9. Puerto Rico Nurse-Midwifery Program, Department of Health, University District Hospital.

Although individual programs vary, generally a graduate nurse must complete an eight-month clinical course in prenatal care, obstetrical techniques, and post partum maternal and child care that leads to a certificate in nurse-midwifery. Others, open only to registered nurses with a baccalaureate degree, demand one or two years of graduate study, leading to a master's degree in nursing as well as a midwifery certification. There are some schools that offer "internships" for nurse-midwives to give them further clinical experience under stringent medical supervision.[1]

---

[1]William H. Sheffey, Chairman; Mayor's Task Force on Health Goals; Washington, D. C., 1969, p. 6.

a. Frontier Nursing Service Midwifery Program
Wendover, Kentucky
Director: Helen E. Browne, O.B.E., R.N., S.C.M.[1]

The nurse-midwife program in Kentucky is the Frontier Nursing Service, operating out of Wendover in Leslie County. It was established in 1925 to meet the needs of a county which had no licensed physician or hospital and to demonstrate the effectiveness of a nurse-midwife program.

Today the Frontier Nursing Service operates a hospital at Hyden (established in 1928) with a capacity of 16 beds, 12 bassinets, and 2 incubators. The Frontier Nursing Service District Nursing Service operates in 12 districts including the Hyden Hospital, Wendover, and 5 outpost centers. The services provided include both home visits and visits to the centers. The Frontier Nursing Service collected specimens for analysis and provided inoculations and vaccinations at the request of the State Department of Health.

The Midwifery Service of the Frontier Nursing Service is a major focus of the program. The nurse-midwives, the students at the Graduate School of Midwifery, and the medical director delivered 289 women in childbirth during 1968-69. An additional 148 deliveries were performed by the student midwives under the supervision of the obstetricians at the Harlan Appalachian

---

[1]This program description is based on the Frontier Nursing Service Midwifery Program, Helen E. Browne, O.B.E., R.N., S.C.M., Director, Wendover, Leslie County, Kentucky 41775.

Regional Hospital. The midwives also provide emergency delivery services and services for a number of cases that are outside the Frontier Nursing Service's usual geographic area. It is noted that no maternal deaths were reported during 1968-69.

In the years prior to World War II, the Frontier Nursing Service relied on England and Scotland to train American midwives and to provide many of the midwives to operate the Frontier Nursing Service itself. The war interrupted this process, and the Frontier Nursing Service Graduate School of Midwifery was established in 1939. At present, the school admits two classes of registered nurses annually to the 26-week training program and the three-month internship. The training is oriented toward preparing the nurses to perform as midwives in rural areas, using the resources which they have to the greatest benefit of the mother and child. The nurses learn to provide prenatal, postnatal, and family planning services in addition to performing and assisting in the delivery of babies. Final written and oral examinations are given the student midwives. Passing these examinations certifies the student as a midwife and permits her to practice in Kentucky, several other states, and several overseas countries. A full listing of the coursework toward the midwife degree is found in the school's catalog.

The Frontier Nursing Service Social Service Department provides funds for indigent families, including paying for coal, glasses, hospital bills, house rent, and ambulance fees. The

Social Service Department also makes referrals to other agencies in order to help the families with which they work obtain needed services.

The following chart indicates the forty-four-year total of the basic services offered by the Frontier Nursing Service.[1]

Patients registered from the beginning	59,945
Children (including babies under 1 year)	36,203
Adults	23,742
Maternity cases (reg.) delivered	15,779
Inoculations	261,652
Patients admitted into the Hyden Hospital	35,011
Number of days of occupation in Hyden Hospital	238,671

[1]Frontier Nursing Service Quarterly Bulletin. Forty-Fourth Annual Report, Volume 45, Number 1, Summer, 1969, (p. 16).

b. Nurse-Midwifery Service Program Proposal
Maternal and Infant Care Projects
Department of Health, New York City
Director: Dorothea M. Lang, R.N., C.N.M., M.P.H.

In New York City it was proposed to utilize nurse-midwives in the Maternal and Infant Care Projects.

"The use of the nurse-midwife as a member of the obstetrical team is particularly suited to the current New York City Health Services Administration's philosophy of comprehensive patient care through cooperative involvement of the Hospital and Health Department services in the community health program."[1]

The provision of direct maternity care by nurse-midwives both in the community health centers and in the affiliated hospital in-patient units offers these patients continuity of maternity care, health education, and emotional support throughout all phases of the maternity cycle from the same familiar individual or group of nurse-midwives. This encourages a more comprehensive and supportive follow-through of each patient's medical, educational, and emotional needs during the antepartum, intrapartum, postpartum, and inter-conceptional phases of the maternity cycle. Care of the newborn is considered an integral part of this service.

---

[1]Dorothea M. Lang. Nurse-Midwifery Service Program. The City of New York. May, 1968. p. 1.

The nurse-midwife is an individual with a combination of two disciplines: nursing and midwifery. She is educated in the concepts of public health with added knowledge and skills of modern American obstetrics. The nurse-midwife is also trained in the psychological management of the maternity patient, being aware of the patient's emotional, social and physical reactions to the various phases of pregnancy, postpartum, and family-community adjustment.

In a nurse-midwifery program, the ultimate responsibility for the patient rests with the medical staff. The nurse-midwife functions within a framework of an approved maternity service. She is never an independent practitioner.

Staffing Patterns and Job Responsibilities

Each nurse-midwifery service associated with an affiliating hospital should be developed to function as a unit, although some coordination of services will be provided through the central office of the Maternal and Infant Care Projects. Each service should include a nurse-midwifery staff sufficient to provide continuity of maternal care throughout all phases of the maternity cycle. A hospital with a heavy maternity patient load should have as its goal a staff of at least four nurse-midwives. A nurse-midwife with advanced preparation and experience should administer each program.

The certified nurse-midwife assumes many of the functions of the physician as they relate to the medically uncomplicated

patient. In the affiliated hospitals in-patient area, her major responsibility will be the management, under medical supervision, of these patients in labor and delivery, making daily rounds to the postpartum patients and their newborn infants, providing educational follow-up, and performing related functions. It is recommended that the nurse-midwife deliver the maximum number of patients for whom she has provided prenatal care through the Health Department Services, except when a diagnosis dictates that a physician's attention is required.

The nurse-midwife, since she is also an experienced nurse, will supplement some of the functions of the public health nurses who have an increasing patient caseload as well as the responsibilities of being in charge of the Health Department Maternity Service.

The nurse-midwife's contribution to the satellite nursing service is in that she conducts the individual post-examination patient-education conferences for the patients who are under her management.

The nurse-midwife will make all referrals for patients who are under her care, to include referrals to the project public health nurse, nutritionist, social worker, or dentist, as appropriate, and refer directly to the specialty services of the affiliating hospital when indicated.

The nurse-midwife will be expected to participate with other members of the health team in the public health nurse's

patient care team conferences and in project related community functions. The nurse-midwife may act as a consultant to the nursing staff in assisting or developing new patient care and patient education concepts for the satellite clinic or hospital patients.

Additional responsibilities of the nurse-midwife are listed under the Job Descriptions.

Nurse-Midwifery Service Administration

A nurse-midwife with advanced preparation and experience will administer each hospital's nurse-midwifery service. She will be called the Nurse-Midwifery Service Administrator and should be employed under the salary grade and title of Senior Superintendent of Nurses (Nurse-Midwife).

The nurse-midwifery service functions within the Department of Obstetrics and Gynecology. The nurse-midwifery service administrator is responsible to the Director of Obstetrics and Gynecology, works in close association with the Director of the Department of Nursing of the hospital, and actively participates in policy-making pertinent to maternity care. Hospital and departmental policies for the nurse-midwifery staff and service should be formulated by the nurse-midwifery service administrator in conjunction with the obstetrical, nursing and hospital administrative staffs. All policies for the nurse-midwifery service should be in accordance with the Statements of Functions, Standards and Qualifications for the Practice of Nurse-Midwifery of the American College of

Nurse-Midwifery. A copy of the hospital's nurse-midwifery service policies are to be sent to the central office of the Maternal and Infant Care Projects. A monthly report of the nurse-midwifery service data shall also be submitted to the central office of the Maternal and Infant Care Projects.

In cooperation with the Director of OB-GYN, administrative arrangements, such as the scheduling of nurse-midwifery staff for the Health Department maternity clinic sessions, hospital delivery and postpartum units, are the major responsibilities of the nurse-midwifery service administrator who, in addition, also provides direct patient care. At all times sufficient nurse-midwives should be assigned to provide necessary coverage for each satellite clinic session - this taking priority over the in-patient service needs.

Affiliating hospitals are encouraged to employ, independently of the project, additional nurse-midwives for service in its own clinics. It is recommended, however, that all nurse-midwife personnel policies are coordinated. If administrative or supervisory responsibilities for this additional staff are expected from the project affiliated nurse-midwife service administrator, an added increment of salary should be offered to her by the affiliating hospital if it employs more than four additional staff members.

If, due to the lack of nurse-midwifery personnel, the nurse-midwifery service administrator (Senior Superintendent

nurse-midwifery service administrator (Senior Superintendent

of Nurses/Nurse-Midwife) position cannot be filled, the most clinically experienced and academically prepared nurse-midwife available should be appointed as the acting nurse-midwifery service administrator until more qualified staff is available. The acting nurse-midwife service administrator will be appointed at a salary grade two steps higher within the category for which she academically qualifies.

Interservice Communications

Avenues of communications for exchange of ideas will be maintained within the working associations of the obstetrical nursing service, public health nursing service, obstetrical physician services and other members of the health team. Liaison with the University Departments will enhance the professional growth of the nurse-midwives.

The Maternal and Infant Care Project, the Hospital and Health Department Directors of Nurses and the Directors of the Departments of Obstetrics and Gynecology will be routinely informed of the monthly nurse-midwifery service data.

Recruitment of Nurse-Midwifery Staff

Most nurse-midwives seek employment in patient and family centered maternity care services and prefer those that enhance professional development and offer liberal fringe benefits.

The responsibility for attracting and maintaining a qualified nurse-midwifery staff rests primarily upon the affiliating hospital. Certified nurse-midwives will be recruited by the Director of Nurse-Midwifery Services of the Maternal and Infant Care Projects upon request, and if qualified, will be referred to the affiliating hospitals.

Upon mutual agreement, the nurse-midwife becomes an employee of the hospital in accordance with the financial and service agreements, as described in the following pages.

Employment Requirements

Qualifications for employment shall be the same as those qualifications and standards developed by the American College of Nurse-Midwifery.

A nurse midwife must be currently licensed as a Professional Registered Nurse in New York State and possess a current nurse-midwifery permit (renewable each year) issued through the Bureau of Maternity Services and Family Planning, Department of Health, the City of New York. Permits are issued in accordance with the Health Code, which reads as follows:

Section 43.03 (c) New York City Health Code

A permit to practice as a nurse-midwife shall not be issued unless:

(1) The applicant is a registered professional nurse who is registered with the State Department of Education pursuant to Article 139 of the Education Law;

(2) The applicant (a) was graduated within two years prior to the date of application from a school for nurse-midwives recognized by the American College of Nurse-Midwifery and approved by the Commissioner, or (b) held a permit under this section within two years prior to the date of application, or (c) presents evidence of satisfactory completion within two years prior to the date of application of a refresher course in nurse-midwifery prescribed by the American College of Nurse-Midwifery and approved by the Commissioner;

(3) The applicant is associated with and will function exclusively as part of a staff of a maternity and newborn service or maternity clinic approved by the Department, and will carry on her activities under the continuous supervision of a qualified obstetrician as defined in section 41.43 (b).

Financial Arrangements for Services Rendered by Nurse-Midwives

In the proposed nurse-midwifery service program, the financial remuneration may be arranged as follows:

A. Reimbursements to the Affiliating Hospital by the Maternal and Infant Care Project of 50% of the Nurse-Midwife's Salary:

The nurse-midwife is to be a full-time employee of the affiliated hospital staff, and as such shall receive all benefits provided under its personnel policies, but shall be assigned to the Health Department - Satellite Clinic on a half-time basis. Financial reimbursement for this 50% of the nurse-midwife's service time will be provided by the Maternal and Infant Care Project, Department of Health, and paid directly to the affiliated hospital for personnel meeting the specified qualifications.

B. Reimbursement to the Affiliating Hospital by the MIC Project on a per hour payment:

Financial reimbursement to the affiliating hospital by the Project for services rendered by the nurse-midwives on a per hour basis may be arranged in selected Health Department Family Planning Services. The per hour rate of reimbursement should be re-evaluated annually. The current (1967-1968) rate is $8.35 per hour. A clinic session usually lasts three hours.

Title and Salary Grade Determination

Title and salary grade determination for each nurse-midwife employed in the program will be approved by the Maternal and Infant Care Project in accordance with the specific qualification requirements for each grade as set forth in the job descriptions for nurse-midwives.

A professional and educational vitae of each staff member must be on file at the Maternal and Infant Care Project office for review of qualifications and title adjustments, if applicable. An annual increment should be offered, for satisfactory service, to the nurse-midwife after every twelve months of her full-time service with the program.

Salary Grades for Nurse-Midwives

As the nurse-midwife extends her nursing practice into the area of obstetrical management under medical supervision, she is simultaneously providing nursing care. In this context,

the nurse-midwife's financial remuneration shall be related to professional nursing salary standards which are adjusted to levels commensurate with the nurse-midwife's education, responsibility, experience and service rendered.

Positions and Salary Grades for Certified Nurse-Midwives

Recommended salary title and grade shall be as follows: (Adjustable to the City of New York Health Services Administration standards of professional nursing salary lines.)

1. STAFF: CERTIFIED NURSE-MIDWIFE
   (R.N. + C.N.M.)
   Salary grade: $8,200 - $10,300 (1967-1968)
   (Same as: Supervisor of Nurses)

2. STAFF: CERTIFIED NURSE-MIDWIFE
   (R.N. + B.S. + C.N.M.)
   Salary grade: $9,400 - $11,500 (1967-1968)
   (Same as: Assistant Superintendent of Nurses)

3. STAFF: CERTIFIED NURSE-MIDWIFE
   (R.N. + B.S. + M.S. + C.N.M.)
   Salary grade: $10,750 - $13,150 (1967-1968)
   (Same as: Superintendent of Nurses)

4. ADMINISTRATOR: CERTIFIED NURSE-MIDWIFE
   (R.N. + B.S. + M.S. + C.N.M. + Supervision)
   Salary grade: $11,650 - $14,050 (1967-1968)
   (Same as: Senior Superintendent of Nurses)

Following are job descriptions for each of these positions.

Replication

Program information may be obtained from the Health Department, the City of New York. Evaluations of programs have been conducted.

Job Description

1. STAFF: CERTIFIED NURSE-MIDWIFE

Salary grade equivalent to Supervisor of Nurses
(1967: $8,200 - 10,300 No. 21)

SUPERVISOR OF NURSES (NURSE-MIDWIFE)

General Statement of Duties and Responsibilities

Under administrative direction and medical supervision, provides antepartum, intrapartum, postpartum and neonatal care as part of a staff of a maternity and newborn service or maternity clinic approved by the Department of Health, the City of New York; performs related work.

Examples of Typical Tasks

Under medical supervision, assumes responsibility for the management of the medically uncomplicated patient throughout the maternity cycle.

Antepartum: Takes medical history. Examines patient - weight, blood pressure, breasts, abdomen, pelvis and pelvic organs. On the basis of findings, evaluates obstetrical status with doctor and patient. Plans and provides continuing health supervision and education.

Intrapartum: Takes medical history and reviews antepartum record. Determines and conducts necessary laboratory procedures. Evaluates status of labor. Plans and provides for continuous care and support. Manages labor and delivery. Provides immediate care of the newborn.

Postpartum: Makes periodic visits to mother and baby and evaluates their condition while in hospital. Plans for and carries out postpartum examinations. Assists mother in plans for care of herself and family throughout the puerperium, postpartum and interconceptional periods.

Participates in patient education programs and furthers continuity of educational concepts into all phases of the maternity cycle.

Assists in orientation and inservice education programs.

Participates in research related to nurse-midwifery or allied fields.

Contributes to the understanding of nurse-midwifery service through effective working relationships among nurse-midwives, and with other disciplines of the health team, patients and the public.

Evaluates policies affecting nurse-midwifery service and recommends revisions.

Performs related work as requested.

Qualification Requirements

1. Possession of a New York State Registered Professional Nurse License is required, and

2. Possession of a Certificate in Nurse-Midwifery is required, plus

3. Possession of a permit to practice nurse-midwifery issued by the New York City Commissioner of Health is required, and

4. At least two (2) years of satisfactory graduate nurse experience.

This class of position is classified in the Non-Competitive Class.

2. STAFF: CERTIFIED NURSE-MIDWIFE

Salary grade equivalent to Assistant Superintendent of Nurses (1967: $9,400 - 11,500 No. 24)

ASSISTANT SUPERINTENDENT OF NURSES (NURSE-MIDWIFE)

General Statement of Duties and Responsibilities

Under administrative direction and medical supervision, provides antepartum, intrapartum, postpartum and neonatal care as part of a staff of a maternity and newborn service or maternity clinic approved by the Department of Health, the City of New York; performs related work.

Examples of Typical Tasks

Under medical supervision, assumes responsibility for the management of the medically uncomplicated patient throughout the maternity cycle.

Antepartum: Takes medical history. Examines patient - weight, blood pressure, breasts, abdomen, pelvis and pelvic organs. On the basis of findings, evaluates obstetrical status with doctor and patient. Plans and provides continuing health supervision and education.

Intrapartum: Takes medical history and reviews antepartum record. Determines and conducts necesssary laboratory procedures. Evaluates status of labor. Plans and provides for continuous care and support. Manages labor and delivery. Provides immediate care of the newborn.

Postpartum: Makes periodic visits to mother and baby and evaluates their condition while in hospital. Plans for and carries out postpartum examinations. Assists mother in plans for care of herself and family throughout the puerperium, postpartum and interconceptional periods.

Participates in patient education programs and furthers continuity of educational concepts into all phases of the maternity cycle.

Participates in orientation and inservice education programs.

Conducts and participates in research related to nurse-midwifery or allied fields.

Interprets the nurse-midwife's function and role through departmental conferences; promotes and maintains effective working relationships among nurse-midwives, and with other disciplines of the health team, patients and the public.

Evaluates policies affecting nurse-midwifery service and recommends revisions.

Performs related work as requested.

Qualification Requirements

1. Possession of a New York State Registered Professional Nurse License is required, and

2. Possession of a Certificate in Nurse-Midwifery is required, and

3. Possession of a permit to practice nurse-midwifery issued by the New York City Commissioner of Health is required, and

4. A Baccalaureate Degree plus satisfactory graduate nurse experience, or

5. Five (5) years of satisfactory clinical nurse-midwifery experience may be substituted for a Baccalaureate Degree.

This class of position is classified in the Non-Competitive Class.

Job Description

3. STAFF: CERTIFIED NURSE-MIDWIFE

Salary grade equivalent to Superintendent of Nurses
(1967: $10,750 - 13,150 No. 27)

SUPERINTENDENT OF NURSES (NURSE-MIDWIFE)

General Statement of Duties and Responsibilities

Under administrative direction and medical supervision, provides antepartum, intrapartum, postpartum and neonatal care as part of a staff of a maternity and newborn service or maternity clinic approved by the Department of Health, the City of New York; performs related work.

Examples of Typical Tasks

Under medical supervision, assumes responsibility for the management of the medically uncomplicated patient throughout the maternity cycle.

Antepartum: Takes medical history. Examines patient - weight, blood pressure, breasts, abdomen, pelvis and pelvic organs. On the basis of findings, evaluates obstetrical status with doctor and patient. Plans and provides continuing health supervision and education.

Intrapartum: Takes medical history and reviews antepartum record. Determines and conducts necessary laboratory procedures. Evaluates status of labor. Plans and provides for continuous care and support. Manages labor and delivery. Provides immediate care of the newborn.

Postpartum: Makes periodic visits to mother and baby and evaluates their condition while in hospital. Plans for and carries out postpartum examinations. Assists mother in plans for care of herself and family throughout the puerperium, postpartum and interconceptional periods.

Participates in patient education programs and furthers continuity of educational concepts into all phases of the maternity cycle.

Assists in supervising nurse-midwives rendering patient care service and helps establish standards for such services; participates in orientation, inservice, and education programs.

Initiates and participates in research related to nurse-midwifery or allied fields.

Interprets the nurse-midwife's functions and role through departmental and interdepartmental planning; and promotes and maintains effective working relationships among nurse-midwives, and with other disciplines of the health team, patients and the public.

Interprets and recommends revisions in departmental policy affecting nurse-midwifery service, and participates in program evaluation.

Serves as a consultant to other members of the health team.

May also participate in the instruction, coordination, and administration of a nurse-midwifery education program.

Prepares budget estimates and reports.

Qualification Requirements

1. Possession of a New York State Registered Professional Nurse License is required, and

2. Possession of a Certificate in Nurse-Midwifery is required, and

3. Possession of a permit to practice nurse-midwifery issued by the New York City Commissioner of Health is required, and

4. A Baccalaureate Degree and a Masters Degree plus satisfactory graduate nurse experience, or

5. Five (5) years of satisfactory clinical nurse-midwifery experience may be substituted.

Job Description

4. ADMINISTRATOR: CERTIFIED NURSE-MIDWIFE

Salary grade equivalent to Senior Superintendent of Nurses (1967: $11,650 - 14,050 No. 29)

SENIOR SUPERINTENDENT OF NURSES (NURSE-MIDWIFE)

General Statement of Duties and Responsibilities

Under administrative direction, organizes and administers the nurse-midwifery service and nurse-midwifery education facilities in a maternity and newborn service or maternity clinic approved by the Department of Health, the City of New York; under medical supervision, supervises nurse-midwives and provides antepartum, intrapartum, postpartum and neonatal care; performs related work,

Examples of Typical Tasks

Under medical supervision, assumes the responsibility for the management of the medically uncomplicated patient throughout the maternity cycle, including the antepartum, intrapartum, postpartum and interconceptional periods.

Directs and supervises the nurse-midwifery activities of a departmental-wide program, and establishes standards for nurse-midwifery service.

Recruits, interviews and recommends appointment of nurse-midwifery staff.

Plans and conducts conferences and discussions with administrative and nurse-midwifery staff, administers orientation and inservice

education programs, provides consultation to other disciplines of the health team, and may participate in the instruction of a nurse-midwifery education program.

Interprets and recommends revisions in Departmental policy affecting nurse-midwifery service; directs nurse-midwifery program evaluation.

Directs research related to nurse-midwifery or allied fields.

Interprets the nurse-midwife's function and role through public relations, interdepartmental and interagency planning, and promotes and maintains effective working relationships among nurse-midwives, and with other disciplines of the health team, patients and the public.

Prepares budget reports covering nurse-midwifery service, supplies, and equipment.

If also in charge of the educational facilities of a nurse-midwifery education program, is responsible for the organization and administration of the services related to the program and determines standards for these services; administers programs for student health, guidance, recreation and welfare; directs field experience programs for graduate nurse-midwifery students.

Qualification Requirements

1. Possession of a New York State Registered Professional Nurse License is required, and

2. Possession of a Certificate in Nurse-Midwifery is required, and

3. Possession of a permit to practice nurse-midwifery issued by the New York City Commissioner of Health is required, and

4. A Baccalaureate Degree and a Masters Degree, plus

5. Five (5) years of satisfactory clinical nurse-midwifery experience of which

6. Three (3) years shall have been in a progressively responsible supervisory or administrative capacity,

7. A satisfactory combination of education and experience may be substituted for a Masters Degree.

Job Description

NURSE-MIDWIFERY PROGRAM ADMINISTRATOR

The City of New York Department of Health
Maternal and Infant Care Projects #507

DIRECTOR OF NURSE-MIDWIFERY SERVICES AND
NURSING CONSULTANT TO SPECIAL PROJECTS

General Statement of Duties and Responsibilities

Under the direction of the Project Director, the Director of Nurse-Midwifery Services is responsible for the general administration of the Nurse-Midwifery Services Program and serves as a nursing consultant to the project contracts.

Examples of Typical Tasks

Directs the Nurse-Midwifery Services Program. Plans, organizes, coordinates and evaluates the nurse-midwifery services.

Develops nurse-midwifery service policies which focus on the care of the patient, favor the practice of nurse-midwifery and help attract and retain qualified nurse-midwifery service personnel.

Communicates and interprets the policies and objectives and their implementation to administration, the medical and nursing staff and to other allied disciplines.

Collaborates with the nurse-midwifery service administrators, the nursing, medical and administrative staff and with representatives of allied groups in planning for coordinated and comprehensive services to patients. Serves as a liaison

between the Health Department clinics, hospitals, the related Bureaus of the Department of Health and Hospitals and the community.

Collaborates with the hospital nurse-midwifery service administrators in determining the staffing plan which will accomplish stated objectives and policies of the Maternal and Infant Care Projects and promotes maximum utilization of nurse-midwifery personnel in these projects.

Approves the functions and qualifications for each nurse-midwifery position.

Recommends criteria and procedures for the recruitment, selection, promotion and termination of employment of nurse-midwifery personnel.

Provides for orientation and inservice educational needs of nurse-midwifery personnel in the Maternal and Infant Care Projects. Provides a climate which helps nurse-midwifery personnel to increase their professional, technical and psychosocial skills.

Participates in reviewing and revising the nurse-midwifery service and personnel policies of the project and its affiliated health care facilities so that some degree of standardization is maintained.

Prepares the annual budget of the Nurse-Midwifery Services Program for consideration of the Project Director.

Initiates, promotes and participates when necessary in studies and research designed to assess nurse-midwifery administrative

practices and nurse-midwifery services. Collaborates in other suitable studies and research.

Develops agreements with educational agencies and the Project health care facilities for the use of clinical facilities by nurse-midwifery students. Collaborates with nursing and other disciplines in staff inservice education and orientation. Serves as a nursing consultant to Maternal and Infant Care Projects and contract programs.

Qualification Requirements

1. Possession of a New York Registered Professional Nurse License is required, plus

2. Possession of a Certificate in Nurse-Midwifery is required, plus

3. Possession of a Permit to practice nurse-midwifery issued by the New York City Commissioner of Health is required, and

4. A Baccalaureate Degree and a Masters Degree, plus

5. Six (6) years of satisfactory clinical nurse-midwifery experience or a satisfactory equivalent, of which

6. Three (3) years have been in a progressively responsible supervisory, consultative or administrative capacity, and

7. Total experience should include two (2) years in public health and two (2) years in a hospital environment.

c. Proposal for the Training and Utilization of Maternity Nurse-Practitioners in the District of Columbia
Mary Helen Carroll, R.N., C.N.M., M.H.A.

It is realized that the desirable preparation for the obstetrical nurse-clinician is certification in nurse-midwifery. In view of the health crisis in the District of Columbia, however, Mary Helen Carroll has pointed out the need for several levels of performance in this new career: a 10-week program; a 9-month course for certification in nurse-midwifery; and a Masters level program. She then presents the following minimum standards of preparation and practice to safeguard the patient, the nurse, the agency, the physician, and the standards of the profession.

Suggested Guidelines for Curriculum (10-week)

Criteria for eligibility to a program of minimal preparedness for the obstetrical nurse-clinician are:

1. Candidate must be a registered nurse who has had at least three years of experience, one of which is in public health nursing;
2. Some experience in maternity nursing;
3. Has demonstrated superior competence and performance.

Theory is taught in an institution of higher learning and clinical practice is provided in an out-patient department.

Classes: (Lecturers: Physicians, Nurse-Midwives, Pharmacologist, Sociologist, Psychiatrist, Psychologist, and Nutritionist)

Normal and abnormal obstetrics (by Board Certified Obstetrician)	20 hours
Pharmaceutical action of drugs commonly used	4 hours

Psychological and psychiatric aspects of adolescence, pregnancy and childbirth	4 hours
Venereal disease	2 hours
Contraceptive methods	6 hours
Policies and procedures - records, legal aspects, hospital admissions, etc.	4 hours
Socio-economic influences	6 hours
Nutrition in pregnancy	6 hours
Classes: (Nurse-Midwife)	
Principles and practices of maternity nursing and management	20 hours
Infant care - 1st month of life	10 hours
Recording techniques and information exchange	2 hours
Seminar	2 hours/week
Clinical practice	6 weeks

A certificate will be awarded upon the successful completion of the above program, subject to employment for an intern period of one year in an agency setting where she will have the supervision of a nurse specialist. During the intern period and thereafter, the clinician will function within the boundaries of her professional competencies and the framework of a medically-directed health service. The clinician's competency is to be evaluated periodically for effectiveness.

Appropriate financial reimbursement for this expanded role is at the level of GS 13.

A nurse prepared according to the above standards is expected to function competently and confidently in the expanded role and within the expectations of the profession.

Following completion of this course, the maternity nurse-practitioner should have the ability:

1. To take a history, with particular emphasis on previous obstetrical findings;

2. To do an assessment of a normal prenatal patient which includes:

   a. General observation
   b. B.P.
   c. Urinalysis
   d. Hemoglobin or Hematocrit
   e. Review and management of lab findings according to standing orders
   f. FHS
   g. Determination of fetal activity (kind and amount)
   h. Vaginal exams and Pap smears
   i. Refill medication according to standing orders
   j. Referral for treatment or assistance as indicated, e.g., V.D., psychiatry, social service, nutritionist, welfare, parent education;

3. To conduct group teaching;

4. To function as part of an obstetrical team;

5. To function as part of a nursing team, performing or delegating responsibilities, such as patient teaching, patient-related mechanical tasks, (forms) follow-up calls, home visits, hospital visits, patient conferences, etc.

Replication

The proposal was submitted early in 1970. Information about the action taken on it may be obtained from Mary Helen Carroll, R.N., C.N.M., M.H.A., at the Division of Maternal and Child Health, the Department of Health, Washington, D. C.

d. Pediatric Nurse-Practitioner

Since 1955 programs are known to have been carried on under medical supervision to use specifically trained nurses in the inspection and evaluation of the physical condition of the child, the determination of a child's progress and the guidance and counseling of mothers. Nurse-practitioners are being used in the Mile-Square Health Center of Presbyterian St. Luke's Hospital, Chicago. The pediatric nurse-practitioner conducts well-child clinics for children from infancy to five years at Massachusetts General Hospital. The new model health center in Philadelphia, sponsored by the Children's Bureau and the Office of Economic Opportunity, is using a pediatric nurse-practitioner. In Colorado, a new professional Child Health Associate has been developed at the University of Colorado Medical Center and is to be examined and certified for licensure by the Colorado Board of Medical Examiners.[1]

Much of the important work in developing the expanded role for the nurse has been done in Colorado. The article by Drs. Silver, Ford and Day (included in the Appendix) describes the Pediatric Nurse-Practitioner Program jointly developed by the Department of Pediatrics of the School of Medicine and the School of Nursing of the University of Colorado in detail. The editorial comment which appeared in the Journal of the American Medical Association is also included in the Appendix.

---

[1]William H. Sheffey, Chairman; Mayor's Task Force on Health Goals, December, 1969; p. 7.

3. Selected Programs, Health Career Division Greenville Tech, Greenville, South Carolina

Health Career Programs at Greenville Tech are designed to provide the health care system and the health professionals with graduates in paramedical and paradental fields who are knowledgeable and proficient in their ability to assume their posts on the health care team, and to assist in making the optimum health care available to all people. The offering of such health career training at educational institutions rather than at hospitals is in line with national trends to separate the academic and practical portions of the training programs. The clinical courses included in the curriculum are held at area hospitals and medical centers.

Admissions Criteria

1. A high school diploma or its equivalent;
2. A transcript of high school grades (if available);
3. Acceptable scores on appropriate tests;
4. Acceptable attitudes based on personal interviews;
5. Acceptable physical examination; and
6. For certain programs, acceptable manual dexterity.

An applicant must be at least sixteen (16) years of age. In some cases, letters of recommendation may be requested. A strong background in the sciences is most desirable for nearly all of the programs.

Award

An Associate in Applied Science Degree will be awarded to those students who complete the two-year programs. A diploma will be awarded to those students who complete the one-year programs.

Programs of study are available in the following categories:

1. Certified laboratory assistant
2. Dental assistant
3. Dental hygiene
4. Dental laboratory technology
5. Dietetic technology
6. Inhalation therapy
7. Medical record technology
8. Medical secretary
9. Mental health technology
10. Physical therapy assistant
11. Practical nursing
12. Radiologic technology
13. Surgical technology

Following is a general description of these programs directly related to maternal and child health services.

1. Certified Laboratory Assistant

The certified laboratory assistant student is trained to perform the more routine laboratory tests under the supervision of a medical technologist or pathologist or other physician.

This program is approved nationally by the Board of Certified Laboratory Assistants, sponsored by the American Society of Clinical Pathologists and the American Society of Medical Technologists. Students successfully completing their training are given a diploma from Greenville Tech and are eligible to take the national examination conducted by the Board of Registry of Certified Laboratory Assistants. If this examination is passed, the student is given the certification of C.L.A. (ASCP)

The curriculum for the clinical laboratory assistant is divided into 24 weeks of instruction at Greenville Tech and 26 weeks of clinical experience in an approved hospital.

2. Dental Assistant

The dental assistant student receives courses in pathology, microbiology, dental radiography, dental anatomy and physiology, dental science, English, and psychology. The student receives training in more depth in dental materials, laboratory procedures, chairside assisting, and general office procedures. The final quarter of the four-quarter course is clinical practice in offices of private dentists in the area.

Students must be neat in appearance and capable of meeting and working with people easily. Students must also enjoy working with their hands and must possess some degree of manual dexterity. They must also have a good background in typing.

This course is fully accredited by the Council of Dental Education of the American Dental Association. Graduates are eligible to take the certification examination given by the American Dental Assistants Association.

3. Dental Hygiene

Dental hygiene students learn how, under the supervision of a dentist, to take dental x-rays, scale and polish teeth, apply fluorides, instruct in self-care, and educate individuals and groups on the importance of a clean, healthy mouth. They may be employed by private dentists, various governmental agencies, and teaching institutions. Dental hygienists must take an examination and be licensed in the state in which they practice.

This course is fully accredited by the Council on Dental Education of the American Dental Association.

4. Dental Laboratory Technician

The dental laboratory technician student learns to construct and repair dental appliances according to the dentist's prescription. The process includes the complete fabrication of full dentures, the casting of inlays, crowns, and bridges; and the scientific designing and casting of partial dentures in precious and non-precious metals. The construction of individualized porcelain teeth is among the techniques learned.

5. Dietetic Technician

The dietetic technician student is trained to be a specialist in the science of foods and the nutritional requirements of the human body, a skill that plays a vital role in the prevention of disease and in the rapid recovery of the sick and injured.

The student also receives training in the equipment, ethics, and business procedures appropriate to the field, as well as in management and supervisory techniques.

6. Inhalation Therapy

The inhalation therapy student learns to use sophisticated equipment under a physician's guidance, in assuring the patient an adequate supply of life-saving oxygen or mixed gases. Among the equipment studied is the oxygen mask, the oxygen tent, the nasal catheter, and other devices used to regulate precisely the various gases and medicines necessary to restore health.

The student also learns to fulfill the responsibility of the inhalation therapist in the hospital of ensuring that adequate supplies of oxygen usage are kept, and that the equipment is in good condition and is in adequate supply.

7. Medical Record Technician

The medical record technician student learns the work involved in a medical record department of a hospital, clinic, or nursing home; and learns the responsibilities of preparing,

analyzing, and preserving health information needed by the patients, by the hospital, and by the public. The medical record student learns to review medical records for completeness and accuracy, and how to translate diseases and operations into proper coding symbols.

The student learns different filing systems used, transcription of dictated reports, compilation of statistics, the nature of research data, and the supervision entailed in the legal aspects of records are also studied.

8. Medical Secretary

This course has a two-fold function: it prepares students for employment in private offices, in hospitals, clinics, extended care and nursing home facilities, pharmaceutical and business offices. The student increases her basic typing skill and learns medical report transcription through the study of medical terminology and anatomy.

The medical secretary may enroll or transfer to the medical record technician program.

9. Mental Health Technology

The mental health technology student learns to work at a preprofessional level in fields ranging from individual counseling and initial interviews for the social worker and the psychiatrist to suicide prevention, working with return mental patients, the disturbed in prisons, initial investigations and in aiding in vocational rehabilitation.

10. Physical Therapy Assistant

The physical therapy assistant student learns to perform selected physical therapy treatments and related duties under the supervision and direction of the professional physical therapist.

The program is designed to provide the student with the knowledge, skill and learning experiences in classroom and laboratory settings which will enrich the personal growth and performance of the assistant in the academic and clinical arts.

11. Practical Nursing

The practical nursing student is given the necessary skills and knowledge in order to provide care for patients needing basic nursing measures; and to share the responsibilities with the professional nurse and physician for the care of patients with more complex nursing needs.

The student has courses in personal and community health, medical/surgical nursing, and maternal and child care, along with clinical experience in the hospital setting.

Upon completion of the course, the student is eligible to apply for the examination to become a Licensed Practical Nurse.

12. Radiologic Technology

The radiologic technology student learns to perform routine procedures with x-ray equipment, and to understand certain directly related aspects of the field such as

fundamental ethics, patient relationships, radiation protection, and basic principles of radiographic exposure. Radiographic positioning and prime factors of exposure will be included.

13. Surgical Technology

The surgical technology student is prepared to function intelligently under the direct and continuous supervision of qualified professional nurses concerned with the principle and practice of surgical asepsis in the operating room. The surgical technician assists the operating room team prior to surgery by placing equipment and supplies in the operating room. During the operation, the surgical technician assists by passing instruments and other materials to the surgeon and his assistants. After operation the technician cleans up, accounts for, and sterilizes equipment.

Upon graduation students may join local chapters of the Association of Operating Room Technicians. Graduates then will be able to take certification examination given by the Association.

Students will be required to purchase standard uniforms including shoes and support hosiery. These are purchased at the beginning of the first quarter through the school.

E. APPENDIX

Table I: List of Health Defects
Found by Physical Examination

Area and Kind of Defect	Total
Hygiene	33
Skin	29
Acne	4
Cafe au lait	2
Eczema	2
Warts	4
Cuts and burns infected	9
Seborrheic keratosis	1
Seborrheic dermatitis	2
Capillary hemangoimia	1
Juvenile melanoma	1
Folliculitis	2
Stria	1
Vision	11
Sty	1
Esotripia	1
Pupil inequality	2
Vision	5
Photophobia	1
Nystagmus	1
Hearing	17
Foreign body	3
Scars on T.M.	5
Infection	1
Hearing loss	8
Speech	31
Voice articulation	
very mild	7
mild	11
moderate	6
severe	4
Dental	75
Caries	58
Orthodontic	17

Area and Kind of Defect	Total
Respiratory	49
TBC or + PPD	3
Pneumonia	1
URI	26
Asthma	4
Opaque Antra	2
Septal defect	1
Epistaxis	3
Polyp	1
Pharyngitis	1
Lymph adenophathy	2
Tonsillitis	5
Cardiovascular	23
Functional murmur	18
Significant murmur	4
Hypotension (postural)	1
G. I.	4
Worms	0
Hemorrhoids	1
Hepatosplenomegaly	3
G. U.	9
Phimosis	3
Cryptorrchidism	2
Protein in urine	1
Hypospadia	1
Cystitis	1
Vaginitis	1
Skeletal-Muscle	13
Pidgeon-toed	2
Scoliosis	7
Flat-footed	2
Fracture	1
Pectus	1
Neurologic	2
Cerebellar tremor	1
Fits	1
Mental Status, Visual-Perceptual	13
Development-Mental, Intellectual (I.Q.)	45

Area and Kind of Defect	Total
Metabolic	15
Growth problem	4
Obesity	4
Allergic	3
Anemias	4

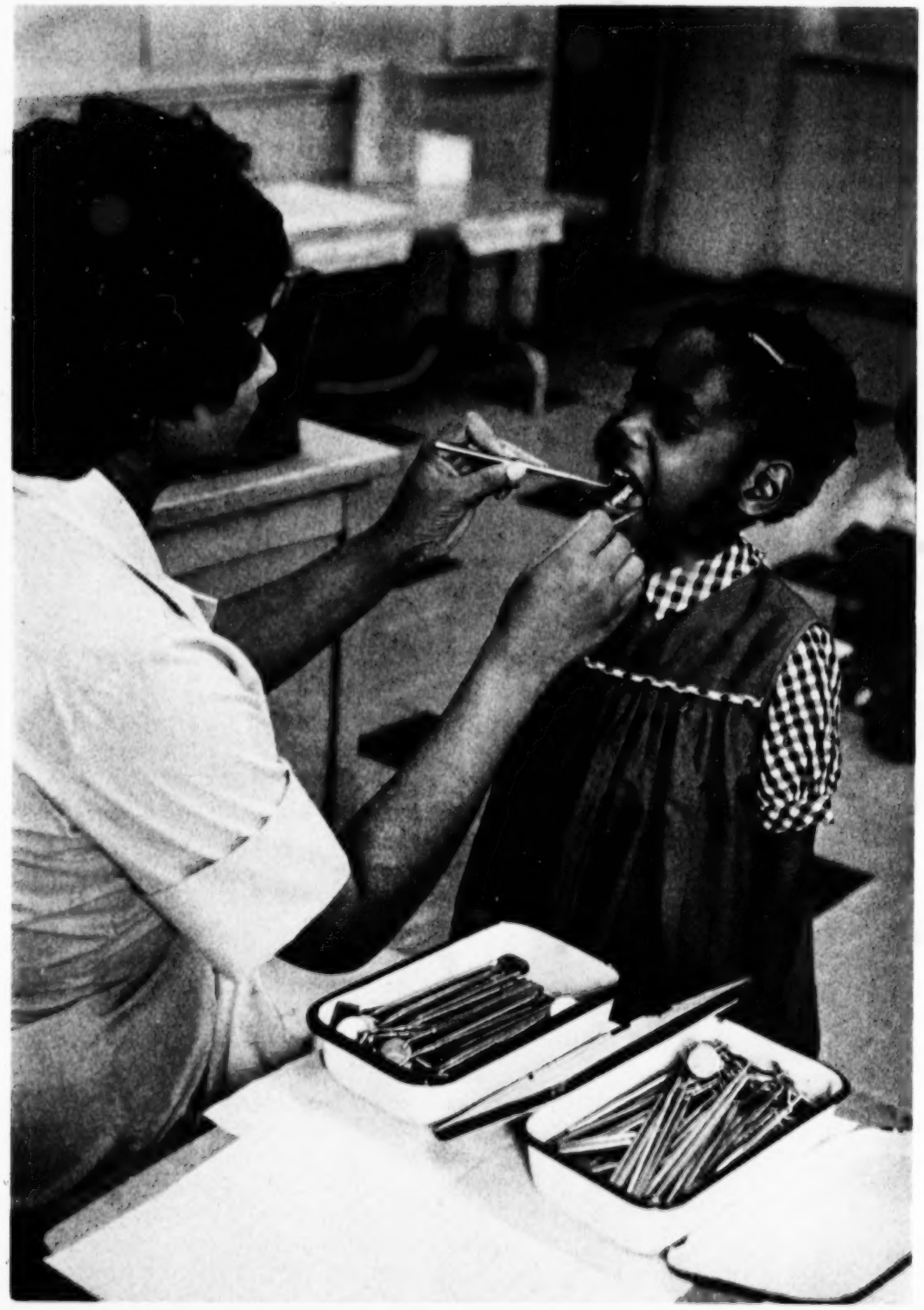


Table II: Positive Identifications of Serious Health Defects According to the Physical Examiner, School Teachers, Public Health Nurse, and University Hospital

Area Examined	P.E.	School	P.H.N.	Uv.H.
Hygiene	33	34	37	7
Skin	26	2	2	35
Eyes	11	17	8	8
Hearing	11	3	4	16
Speech	34	16	32	3
Dental	61	57	38	6
Respiratory	42	13	10	32
Cardiovascular	25	1	0	11
Gastro-Intestinal	4	20	10	25
Genito-Urinary	6	3	0	13
Musculo-Skeletal	12	3	1	15
Neurologic	1	10	2	9
Mental	46	51	47	4

NOTE: Pages 161-208 are not available for reproduction at this time.
The copyrighted journal articles that appear in the appendix are:

"The Pediatric Nurse-Practitioner Program: Expanding the Role of the Nurse to Provide Increased Health Care for Children," by Henry K. Silver, Loretta Ford, and Lewis R. Day.
(Reprint: Journal of the American Medical Association; v204, n4 April 22, 1968)

"JAMA Editorials: Pediatric Nurse-Practitioner Program."
(Reprint: Journal of the American Medical Association; v204, n4 April 22, 1968)

"Observation Post, Mobile Screening Laboratory, University of Wisconsin, Wautoma, Wisconsin."
(Reprint: Medical-Surgical Review; February 1970)

"Changing Significance of Food," by Margaret Mead.
(Reprint: Journal of Nutrition Education; Summer, 1970)

"The Best Use of Surplus Commodities," by James E. Roper.
(Reprint: Reader's Digest; v96 February 1970)

"View from Louisiana," by Joseph D. Beasley.
(Reprint: Family Planning Perspectives; v1, n1, Spring, 1969)

F. BIBLIOGRAPHY

Bibliography

1. American Public Health Association: Program Area Committee on Child Health. Services for Children with Cerebral Palsy. New York, 1967.

2. _____: _____. Services for Children with Communicative Disorders. New York, 1967.

3. _____: _____. Services for Children with Eye Problems. New York, 1967.

4. _____: _____. Services for Children with Heart Disease and Rheumatic Fever. New York, 1960.

5. _____: _____. Services for Children with Orthopedic Handicaps. New York, 1962.

6. Birch, Herbert G., M.D., Ph.D., and Gussow, Joan Dye. Disadvantaged Children: Health, Nutrition and School Failure. New York: Harcourt Brace and World, Inc., 1970.

7. Chandler, Caroline A., et al. Early Child Care: The New Perspectives. Edited by Dittmann, Laura L. New York, New York, Atherton, 1968.

8. Dittmann, Laura L. Children in Day Care With Focus on Health. Washington, D. C.: U.S. Government Printing Office, 1967.

9. Haynes, Una. A Developmental Approach to Casefinding. Washington, D. C.: U.S. Government Printing Office, 1967.

10. Kugel, Robert B. and Parsons, Mabel H. Children of Deprivation; Changing the Course of Familial Retardation. Washington, D. C.: U.S. Government Printing Office, 1967.

11. U.S. Department of Health, Education and Welfare, Office of the Assistant Secretary For Program Coordination. Maternal and Child Health Care Programs. (No publisher), 1966.

12. Planned Parenthood-World Population, Department of Program Planning and Development. Family Planning Programs in the War Against Poverty; A Guide for Community Action Programs. New York, (no date).